

EMPLOYEES' MAGAZINE

The Union Pacific Coal Company
Washington Union Coal Company

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AUGUST, 1930





A Very Simple Re-construction of the Pharos of Alexandria.

*"From the blue waters to the deep blue skies,
Earth-based—sky-capped—those stately structures rise.
The exulting warriors, as their swift-keels glide
Proudly triumphant o'er the heaving tide,
Eye with delight their much-loved, long-sought home."*

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THE UNION PACIFIC COAL COMPANY
WASHINGTON UNION COAL COMPANY

VOLUME 7

AUGUST, 1930

NUMBER 8

The Pharos of Alexandria

"Sostratus, the Cnidian, to the Gods, the Saviours, for the benefit of sailors."

THE seventh and last of these "ancient wonders of the world" is the famous old lighthouse of one of the world's most cosmopolitan and brilliant cities—the Pharos of Alexandria.

Unfortunately the ancient writers have given us meagre descriptions of the lighthouse which they classed as one of the "Seven Wonders." We quote one description which was, we are told, given by Pliny, the Roman, who perished at Pompeii during the eruption of Vesuvius in 79 A. D. He wrote:

"There is another building, too, that is highly celebrated; the tower that was built by the king of Egypt on the island of Pharos at the entrance to the harbor of Alexandria. The cost of its erection was eight hundred talents, they say; and not to omit the magnanimity that was shown by King Ptolemaeus on this occasion, he gave permission to the architect, Sostratus of Cnidus, to inscribe his name upon the edifice itself. The object of it is, by the light of its fires at night, to give warning to ships of the neighboring shoals, and to point out to them, the entrance to the harbor. At the present day there are similar fires lighted up in numerous places. — The only danger is that when these fires are kept burning without intermission, they may be mistaken for stars, the flames having very much that appearance at a distance."

Briefly, this is the setting for the first great lighthouse. Off the coast of Egypt; where the western branch of the river Nile flows into the Mediterranean (please see map in previous issue of this magazine) there was once a small island. It was Pharos which was also called the Garden of the Fig Trees because figs grew abundantly in its sea-washed soil when little else would. The surrounding sea abounded with reefs. When Alexander the Great made Egypt a part of his empire, which included the known world, he decided to build for himself a world capital which should surpass every other city. The site selected was on the mainland, beyond the island of Pharos. In the enormous plans for Alexandria, Pharos ceased to be an island, but was made the outer limit of a harbor division which gave Alexandria two harbors instead of one.

To make the divided harbor safe, the famous lighthouse was built. It was 450 feet in height, and could be seen at a distance of 100 miles. It was built of several stories, decreasing in dimension toward the top where the fires were lighted in a sort of lantern. In the upper galleries, mirrors were arranged in such a manner as to show the ships and objects at sea for some considerable distance. One description tells this rather human little story. King Ptolemy who succeeded Alexander the Great, and during whose reign the "pharos" was completed, placed this inscription upon the completed building:

"King Ptolemy, to the Gods, the Saviours, for the benefit of Sailors."

The architect, who had been commissioned by Alexander to build the lighthouse and who it might seem from other accounts, had been promised permission to have his name inscribed on it, did this. He carved his own inscription on solid marble as follows:

"Sostratus, the Cnidian, to the Gods, the Saviours, for the benefit of sailors."

Then he coated it with cement so that it wasn't immediately visible. He engraved the king's inscription in the outer covering as he must. But he well knew that when time had decayed the mortar his own name, and his inscription would be the ones which should live.

Unlike the modern lighthouse, which is usually a round tower resembling a single shaft reaching into the air, this old lighthouse consisted of several stages. Again three descriptions we have before us differ and contradict, but all agree that there were several stages or sections, each one differing in form. A tradition claims that the three stories of the first stage were hexagonal, that those of the second stage were square, and all above were circular. A shaft reached from the foundation through the centre to the very summit, up which the fuel for the fires and the other necessities were raised by a windlass.

The vast space in the several stories of the two lower stages were occupied with chambers, yet

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Articles of interest to our readers, photographs and sketches suitable for reproduction, are solicited and should be addressed to Editor, Employees' Magazine, Union Pacific Coal Company, Rock Springs, Wyoming.

neither their number nor their arrangement may never be known. From an Arab it was learned, we are told, that they were more than three hundred in number, and so intricately arranged that no stranger could find his way among them without a guide. Another, with still more imagination, tells that when a party of Moors on horseback entered the lighthouse they lost their way, and coming to a crevice in the glass foundation upon which they thought the structure was built, many of them fell within and perished. Soldiers are supposed to have occupied the lower chambers and lighthouse keepers the upper ones.

But the greatest interest of this extraordinary lighthouse is perhaps its relationship to the famous city of Alexandria whose very name spells romance and exotic grandeur. We may enumerate its epochs. From B. C. 323 to 30 B. C., it was the residence of the Greek kings of Egypt, the resort of commercial exchange and the centre of commercial people. Many Jews lived there. By the Greeks it is said to have been fifteen miles in circumference with a population of 300,000 citizens and as many slaves.

But kings rise and fall and during the conquering campaigns of Julius Cæsar it was damaged badly. From 30 B. C. to A. D. 640 it was, however, a flourishing city under the Roman emperors. It adopted the Christian faith, and became one of its strongholds. During this period many of its works of pagan art were destroyed. The library, founded by the Ptolemies, was ordered to be burned because "If these writings of the Greeks agree with the books of God they are useless, and need not be preserved; if they disagree, they are pernicious and ought to be destroyed." They were employed to make fires to heat the 4,000 baths of the city. At least this story throws some light on another phase of the civilization of that time. And the history of Alexandria is the history of the world for many centuries. It tells about the manner in which Christianity was received and taught in Egypt.

Among the scholars of Alexandria are to be found great mathematicians—Euclid, father of scientific geometry (for whose memory few of us could display any real affection); Apollonius of Perga in Pamphylia, author of a work on Conic Sections, still extant; astronomers who used Egyptian hieroglyphics for making the northern hemisphere, and fixed the images and names still used, of the constellations. There are many others, whose names at least we have had to know—Demosthenes Philalathes, who wrote the first work on diseases of the eye.

The Pharos of Alexandria is long since gone to dust. Various expeditions have sought for traces of its foundations without results. A modern lighthouse worthy of the present Egypt stands nearby the supposed site of its illustrious predecessor. But it is insignificant when compared with the Pharos, the wonder of the brilliant Ancient World, and the like of which no modern man has ever seen.

Run of the Mine

North of the Great Lakes and the St. Lawrence River

IF A hustling, hurry-up American wants to shift himself into a quieter atmosphere, he need but go into Southern Ontario and Quebec provinces in Canada. On the American side, the train passes through great fields of corn and wheat, from ten to fifty automobiles whizzing by on the highways, few women and children working in the fields. On the Canadian side, we pass numerous small fields of wheat, barley, rye, corn and clover; few autos, and women and girls working in the fields. The cattle, with exceptions, were of the common specie kept on American farms forty years ago. We saw quite a few cows with quite ornate horns, such as the one we tried without much success to break to the saddle when we were in the Robinson Crusoe age.

Passing from Ontario into Quebec, the transition was even more striking. The French settler still maintains many of the old customs, among which we noted the long narrow fields, all fenced either with "stake and rider" or otherwise barbed wire fencing. The early French settler built his log cabin along the side of a stream, and to provide frontage for as many neighbors as possible, he cleared a long narrow strip, at times but a few rods wide, going farther back with the passing of the years until his farm might be two miles long and but a few rods wide.

When he was driven inland from the stream he cut a road through the woods and today with the timber all cleared off, the houses line both sides of the road for miles. Quebec presents a sea of hay barns, nearly all without paint, but very frequently sporting three or four lightning rods. Canada is certainly the lightning rod man's paradise. We would favor more paint and fewer lightning rods ourselves.

Lower Canada has not forgotten her religion. All through the farming settlements can be seen the twin spires of the churches, surmounted by crosses that top the highest trees. Behind the church is the graveyard and the church bells call the people to service, to marriages, baptisms, and to burials. We are old fashioned enough to believe that the church should be surrounded by its graveyard, and that it lost much of its influence when it moved to Main Street. Old Trinity, on lower Broadway, New York City, whose iron gates are passed by millions yearly, flanked as it is with its half obliterated tombstones, yet gives us a warning to "Stop, look and listen."

British Mine Labor, British Mines, and British Railways

WE WERE privileged in July to visit the top works of two British collieries; one in Scotland, the other in England. The Scottish colliery was working three days a week; we were told that the average pay was about ten shillings (\$2.40) a shift. When the work goes below three days, the less ambitious class apply for the dole. The English colliery lies fast by the old town of Coventry, where Lady Godiva won immortal fame by taking an early morning horseback ride. At this colliery, five days a week is the rule, but we noticed coal stored upon several acres of ground about the colliery; perhaps one-half of the production is going into storage. If the demand does not improve, the storing process must cease, and what then?

At the Scottish colliery, we saw the most luxurious bath and change house constructed in Great Britain. The interior was furnished in white tile with steel lockers for each of the 800 employees. The capital investment was provided from a government fund and the men pay six pence (\$.12) per week for using the facilities. The cost of the plant approximated \$75,000.

Here we saw young women doing manual labor about the tippie, cleaning the bath house and picking coal on the tippie. Everywhere above ground will be found boys, more so about the tippie where the little "tubs" holding 1,300 to 1,500 pounds flit around like roller skates on a rink floor. Certainly much labor could be saved about the two tipples we visited by the introduction of labor saving devices. Below ground there seems to be a demand for the small tubs. Their use make very small haulage ways, light tram roads and short curves, or the substitution of turntables for switches possible.

The British freight cars look like toys; the majority of the coal cars carry ten to twelve tons. The coal is of high grade, well cleaned, and fines are frequently washed to a guaranteed ash content of not to exceed three per cent. The passenger locomotives are a joy to look at. They resemble greyhounds, all clean and handsomely trimmed. We were struck with the endless number of trains, both freight and passenger, slipping in and out, with very few cars attached. The load factor must be very low.

We rode The Royal Scot from London to Glasgow, fares first class about five cents a mile. The compartment was comfortable and clean. The diner was run more on the buffet order, and does very well for a meal or two. Words cannot describe the beauty of the countryside, the little fields divided by hedges, the clean thatched cottages yet seen

but giving away fast to brick with slate roofs. There is the sense of the diminutive in the farms, the railway trains, the small "tubs", and the little seven horse power autos that "Harry" uses to take his "Sadie" out in for a ride. England, whose empire reaches wherever the sun shines, built her greatness on a foundation of small things. Another way of saying that it is the little things that count.

Incentive Systems of Wage Payments

THE National Industrial Conference Board recently made public a study entitled "Systems of Wage Payments," in which piece rate wages, special bonuses and other methods of compensating employees according to output, are fully set forth.

The study makes clear the fact that incentive wage systems cannot be indiscriminately applied to all types of work. To begin with, any task in which the results obtained cannot be accurately measured and tasks in which the quality of output exceeds in importance the item of volume, must always be handled under a time wage system.

The advantages derived from incentive wage systems, the conference board finds, result in part from the increased efforts which such systems stimulate the worker to put forth in order to increase his earnings, and partly from the effect of such incentives in attracting workers of more than ordinary ability.

Concerning the results of the piece wage system, which incentive is most widely used, reports from manufacturers who have adopted this system indicate that output has been raised anywhere from 10 per cent to 400 per cent. Earnings of labor increased from 10 per cent to 100 per cent and unit costs reduced from 10 per cent to 50 per cent, showing that the workers share fully in the benefits of cost reduction.

The conference board study emphasizes the effect of foreign competition upon American industry and points out that adoption of incentive wage systems by industrial establishments in this country may prove advantageous in meeting such competition. On this aspect of the question, the report states:

"As industrial competition throughout the nations of the world grows more and more intense, with manufacturing no longer confined to the countries of western Europe, but developing rapidly in Japan, India, Australia, Canada, and South America, and as the superior advantages of quantity production compel larger and larger enterprises the American manufacturer will find 'incentive systems' of wage payment increasingly urgent. A sound understanding of their essential principles is therefore very important."

The loading of coal by machinery under a series

of operations, such as cutting, drilling, shooting and loading into pit cars, carries too many variables to make the piece work basis a thorough success, but on the other hand, a combination of the time basis and a bonus computed upon an output exceeding a fair performance, would seem to be both desirable and equitable; more so when a period of two weeks is used in making the bonus determinations.

The Union Pacific System Again Wins the Gold Medal of the American Museum of Safety

IN THE closing days of June, the E. H. Harriman Gold Medal was again awarded to one of the Union Pacific System Lines, The O. W. R. R. & N. Co., for meritorious achievement in safety results, the record made by the O. W. R. R. & N. in 1929 leading all other Class One Railroads.

From statistics prepared by the Interstate Commerce Commission, it was shown at the presentation meeting that 1,700,000 railroad employees suffered but 58,478 reportable accidents in 1929, a reduction of 61 per cent in the six-year period, 1923 to 1929.

It was further shown that a railroad passenger could on the basis of the 1929 performance, travel 32,000 times around the earth without accidental death, traveling continuously at the rate of fifty miles per hour for more than 183 years. The records for 1929 show that 118 roads carried 148,379,000 passengers more than 8,000,000,000 miles without a single passenger fatality.

The remarkable reduction in accidents to passengers and employees made by our American railroads within the past six years is due to the intensive effort made by employers and employees alike to preserve life and limb. While the railroad service is in no sense as hazardous as coal and metal mining, there is no definite reason why, by proper and adequate effort entered into in good faith by men and management, a similar rate of reduction cannot be made in the number of accidents suffered in our coal mines.

Britain's Unemployment

THE spectre of unemployment hovers over Great Britain. On June 23rd, the Secretary to the Minister of Labour reported 9,719,400 of the age of 16 to 64 in employment in Great Britain. This was 4,200 fewer than a month before and 569,500 fewer than a year ago. Within the year the number of people employed, of both sexes, fell off nearly six per cent.

On June 30th, a total of 1,890,600 workers were without employment, divided as follows:

1,358,000 men, 447,000 women, 45,400 boys, and 40,200 girls. This vast army, including dependent children, would make up a city more than half the size of London. The women without employment are mainly factory hands, their employ either shut off by the closure of plants or by sweeping reduction in forces.

It is a discouraging sight to see the hundreds of idle young men loafing about such cities as Glasgow and Birmingham. Doubtless, the same condition exists in the other great industrial centers, such as Manchester, Sheffield, etc., which we have not visited. These young men are living on the charity of the nation, the dole as it is called, wasting the best years of their lives. Many of them have been unemployed two or three years, becoming habitual idlers, even marrying and becoming fathers while living on the thirty shillings (\$7.20) a week that is being taken from the taxpayer. Taxes are so high that industry is throttled. It must be borne in mind that what are referred to as "rates", taxes levied against property, go on whether the property pays a return or otherwise.

That the British youth has learned to accept the role of state dependency, and even accepts it in a cheerful manner, is evidenced by the fact that dole recipients plan vacations at the seaside, the motor-coach agencies running special low rate charrs-a-bancs from coast resorts into the cities on the statutory registration days, enabling the person vacating to comply with the registration laws.

The Labour Government is on its last legs, and may fall any day. Making pre-election promises and making good after election are quite different things. The political cry of the day is for a tariff that will keep foreign goods out of the British market. We in the United States are advocating the same thing. Self containment is a beautiful theory but the people and the nation that attempts to isolate itself is doomed to disappointment. China is the classic example of staying at home, standing still. Back of all the poverty that exists in Great Britain lies an inherent respect for law, order and morality. It is a pity that a people such as these should lack opportunity.

FORETHOUGHT

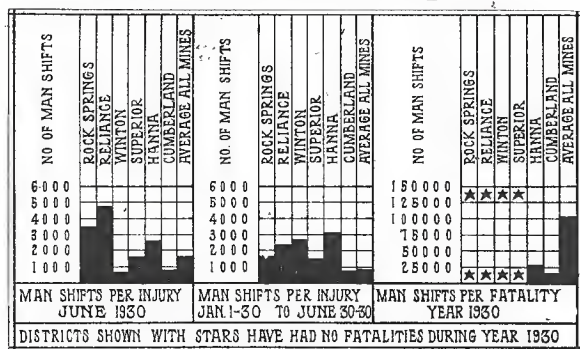
An Aberdonian wished to catch the morning train to London, and, being a heavy sleeper, was in doubt if he would wake up early enough. He thought of several methods to ensure success, but each seemed to indicate the necessity of a tip. In the end he posted himself a letter without a stamp.

Next morning early there came a thunderous knock on the door. The Scot opened the window and the postman cried: "Here's a letter with no stamp; there's thruppence to pay."

"Take it back," commanded the Scot, "carelessness like that doesna deserve to be encouraged."

—== Make It Safe ==—

June Accident Graph



Place	Man-shifts	Injuries	Man-shifts Per Injury
Rock Springs	7,061	2	3,530
Reliance	4,827		
Winton	3,727	5	745
Superior	9,597	6	1,599
Hanna	5,322	3	1,774
Cumberland	1,611	2	805
Total	32,145	18	1,786
PERIOD JANUARY 1, 1930 TO JUNE 30, 1930			
Rock Springs	63,180	34	1,858
Reliance	26,151	11	2,377
Winton	29,799	10	2,980
Superior	53,241	38	1,401
Hanna	30,585	10	3,058
Cumberland	14,596	8	1,824
Total	217,552	111	1,959

June has been a bad month for three of the mines, in regard to fatal accidents. Hanna's stars have dropped from the fatality column during the month, when on June 3, Gust Giatrakis, Miner, No. 2 Mine, was fatally injured by a fall of coal.

On June 13, William Hackett, a contractor, driving a rock tunnel in Reliance No. 1 Mine was instantly killed by a fall of wet sandrock and his partner, Joseph Mitchelson, received three broken ribs.

On June 27, John Kossenjons, a representative of the Goodman Manufacturing Company, was instantly killed in Hanna, No. 4 Mine, by being trapped between the rib and a loading machine while moving it from the surface to the working face.

Mr. Hackett and Mr. Kossenjons were not employees of The Union Pacific Coal Company and for that reason their names do not appear on the accident column or the graph. The two latter fatalities, however, will be charged against the coal mining industry and against our own safety record.

During the month there were 18 compensable accidents, all of which occurred underground. Eleven of the accidents happened at the working face, four from falls of face coal, three from falls of top coal and rock, and four by the handling or operating of machinery. The seven other injuries happened to men on haulage, such as rope riders and drivers.

As has been stated many, many times before, most of these accidents could have been prevented by using more precaution and being more alert to the hazards connected with the mining of coal.

Winton and Reliance Win Prizes

For the six months period January 1, 1930, to June 30, 1930, Winton and Reliance win the prizes awarded to the districts showing the greatest number of man shifts for each injury occurring and by showing the largest percentage increase of man shifts during the same period; based on their standings for the year ending 1929.

As announced at the beginning of the year, the awarding of a pennant to the district showing the best six months safety record has been discontinued, and in its place an ornamental clock or other useful trophy for the Community Council for use in the Club Houses has been substituted.

The award of the 100 volumes of fiction to the district showing the highest percentage of increase over its preceeding cumulative period will be continued during the year 1930.

Winton wins the ornamental clock by its showing of 2605 man-shifts per injury during the last 6 month's period and Reliance the 100 volumes of fiction by showing the largest percentage increase of man-shifts per injury or 50.28% increase.

Three of the districts, Reliance, Winton and Hanna show an increased percentage while Rock Springs, Cumberland and Superior show a very marked decreased percentage of man-shifts per injury. The average of all mines shows 10.69% decrease of man-shifts per injury.

Following is a tabulation showing the figures for the six months period just ending:

Place	Man-shifts	Injuries	Man-shifts per Injury	Percentage increase or decrease over previous period
Winton	31,267	12	2,605	28.57% Inc.
Hanna	31,372	13	2,413	10.13% Inc.
Reliance	25,719	12	2,143	50.28% Inc.
Rock Springs	63,164	41	1,540	14.11% Dec.
Cumberland	14,419	7	2,059	21.56% Dec.
Superior	53,241	37	1,439	46.00% Dec.

All Mines 219,182 122 1,796 10.69% Dec.

Davy's Proudest Triumph

A native of Penzance, the son of a wood carver, born on the 17th of December, 1778, it was fitting that the people of Penzance should recently pay homage on the centenary of the death of Sir Humphry Davy. His first awakening to the realities of life came with the death of his father, which changed the ingenious, mischievous boy into a serious-minded and purposeful man. He made many discoveries, but his proudest triumph was the invention of the safety-lamp with which his name will always be associated. The problem was put to him in August and within three months he offered his solution. When pressed by a friend to protect his lamp, which was worth a fortune, by a patent, he replied: "My good friend, I never thought of such a thing; my sole object was to serve the cause of humanity, and if I have succeeded I am amply rewarded in the gratifying reflection of having done so." Honoured at home and abroad, created knight in 1812 and baronet six years later, elected president of the Royal Society in 1820, Davy richly earned his laurels. He died at Geneva on May 29th, 1829, at the early age of 51, ranking in Cuvier's estimation "in the first rank among the chemists of this or any other age."

(Clipping from an English newspaper sent in by Mr. James Hearne, Hanna, Wyoming.)

National Statistics

APPROXIMATELY 97,000 people were killed by accidents in the United States during 1929. This represents an increase of about 2 per cent over 1928. The increase was greater than our increase in population. The 1929 accidental death rate per 100,000 population was approximately 79.9 and in 1928, 79.2. This is the highest rate since 1918, and has been exceeded only five times in the last 17 years. It is a far higher rate than prevails in any important foreign country. The Canadian rate of 62.5 was next in 1928.

In 1928 there were only five diseases that killed more people than accidents. Accidental deaths were as numerous as those resulting from tuberculosis. Accidents were the second most important cause of death, being exceeded only by heart disease.

The best information available indicates that there are about 100 disabling injuries for each death, which means a total of about 10,000,000 annually.

Motor vehicle deaths and injuries continue to mount upward by leaps and bounds. There were approximately 31,000 such deaths in 1929, an increase of 3,000 over the previous year. The total increase in all fatalities was 2,000. Therefore fatalities other than where motor vehicles were involved decreased about 1,000. Since 1913 the death rate from accidents not involving motor vehicles has declined from 81.6 per 100,000 population to 57.2. In the same time, the motor vehicle death rate has increased from 3.9 to 22.7 per 1,000,000 population.

Estimations for 1929 deaths show:

Motor vehicle accidents.....	31,000
Other public accidents.....	20,000
Home accidents	23,000
Industrial accidents	23,000

The subject of comparison of non-fatal accidents with other industries has often been suggested by our employees. Satisfactory comparison has heretofore been difficult to obtain. However, the National Safety Council began three years ago to gather such data, and the data for 1929 is based on state health department reports to the Council from territory representing 69 per cent of the nation's population.

To get a fair comparison where so many industries are involved, computations are made to show accident frequency and accident severity rates.

Frequency is the number of lost time personal injuries per 1,000,000 hours exposure. Severity is the number of days lost from accidents per 1,000 hours.

Following is a comparison of the frequency and severity rates for injuries for 1929 in 27 industries. The mining industry is divided into four divisions to show relation of bituminous coal.

Industry	Frequency	Severity
Mining	74.43	9.99
Anthracite	99.68	10.87
Bituminous	69.25	11.69
Metal	52.16	5.99
Non-Metal	31.10	8.15
Meat Packing	55.94	1.47
Construction	50.41	4.62
Refrigeration	43.35	3.04
Woodwork and Lumber....	42.83	3.59
Tanning and Leather.....	31.35	1.60
Foundry	30.30	1.73
Electric Railways	29.75	1.93
Metal Forming	29.71	1.67
Ceramics	28.93	1.07
Paper and Pulp.....	28.43	1.77
Petroleum	26.78	2.49
Quarry	26.71	6.11
Non-Ferrous Metal.....	23.16	2.71
Public Utility	22.58	3.13
Automobile	22.17	.97
Ry. Car and Equipment....	21.88	2.20
Food	21.07	1.50
Rubber	19.25	1.24
Machinery	18.91	1.11
Steel	18.13	2.75
Glass Products	17.70	.80
Chemical	17.50	1.72
Laundry	12.78	1.53
Printing and Publishing....	12.23	.67
Textile	11.82	.58
Cement	9.55	3.64
Average	25.53	2.23

The highest rates for both frequency and severity are found in the mining industry. Its frequency rate is three times the average for all industries, and its severity rate four times. The cement industry has the lowest frequency rate and the textile group the lowest severity rate.

—Monthly Safety Report.
Old Ben Coal Corporation.

June Injuries

KEEP YOUR NAME OFF THIS LIST

- CHARLES SHIELDS—*Miner—Rock Springs No. 8 Mine.* Abrasion and contusion over left tibia. Was injured while pulling down coal at the face. A piece of coal fell and struck his left shinbone.
- HARRY JAMES—*Driver—Rock Springs No. 4 Mine.* Fracture of third left rib. Was jacking a derailed car onto the track, when the jack slipped and struck him on the ribs.
- TONY TOMICH—*Conveyor man—Winton No. 3 Mine.* Laceration and contusion of left leg below knee. Was attempting to straighten a machine jack pipe with a lifting jack, when the jack pipe slipped and struck Tomich's left leg.
- JOHN E. REMITZ—*Rope Rider—Winton No. 3 Mine.* Abrasion over right eye, laceration on top of head. While lifting a derailed car on track at a parting, a fall of rock hit the trolley line, knocking the wire out of the hangers and the wire struck Remitz throwing him against the car.
- MIKE DEMICH—*Conveyor man—Winton No. 3 Mine.* Fracture of lower end of tibia. Was standing on the edge of running duckbill while it was being pushed into a pile of coal. His leg was caught between a chunk of coal and the duckbill and caused the above injury.
- JOHN PERKOVICH—*Face man—Winton No. 1 Mine.* Fracture of end of third finger, right hand. A lump of coal rolled from the pile of coal at face and injured left hand.
- TONY ESKRA—*Inside Laborer—Winton No. 1 Mine.* Fracture of thumb, radius and ulna. Was riding a truck and holding a conveyor pan which caught on the roof, catching Eskra's hand and wrist between pan and rib.
- MAT VALANDRO—*Machine Runner—"B" Mine, Superior.* Contusion and laceration of first finger of left hand. Was operating a cutting machine and got his hand caught in the machine clutch.
- WILLIAM WEST—*Miner—Superior "C" Mine.* Contusion of right foot and ankle, also first finger of right hand. Was working at face when coal and rock rolled over from face, striking him and causing above injuries.
- ENRICO ZAMPEDRO—*Conveyor man—Superior "E" Mine.* Contusion and laceration of fourth finger left hand. Was lifting conveyor pan and caught little finger between the pan and a prop.
- ANDY DLUGAS—*Duckbill Operator—Superior "E" Mine.* Fracture of left leg. Was working at face when face coal fell, striking him and breaking left leg.
- W. W. LAWS—*Rope Runner—Superior "E" Mine.* Wound to face and right eye. Was unloading screw jack and handle of jack hit him on right side of face.
- WILLIAM COOK, SR.—*Rope Runner—Superior "E" Mine.* Dislocated hip and internal injuries. Was coupling rope onto trip of empty cars, when another trip was dropped onto the parting bumping trip that Cook was coupling. Cook failed to hear the oncoming trip and was rolled under the bumper of rope car.
- GUST GIATRAKIS—*Miner—Hanna No. 2 Mine.* Fatal accident. Was barring down loose coal at junction of lip and top coal, preparatory to placing a ladder to bar down some overhanging rock. A chunk of coal fell just above the piece he was trying to bar down and struck Giatrakis, causing fatal injuries.
- ALEX GREENWOOD—*Rope Runner—Hanna No. 4 Mine.* Bruise on left hip. Loaded trip on which he was riding, jumped the track, throwing him from the trip, and he fell on a rail.
- T. W. CASE—*Driver—Hanna No. 4 Mine.* Contusions and lacerations on toes of right foot. While attempting to take hold of the halter rope on a horse, the horse turned suddenly and stepped on the driver's right foot.
- ADAM HARDOZOVICH—*Miner—Cumberland No. 1 Mine.* Laceration, right forearm. Was picking coal at the face when a piece of top coal fell on right forearm causing a laceration.
- ANGELO PIERANTONI—*Miner—Cumberland No. 1 Mine.* Laceration, right forearm. While barring down loose top coal, a piece of coal slid down the bar, causing the above injury.

By-products of Rock-Dusting

Now that rock-dusting has come to stay, doubtless a number of uses will be found for it besides that of extinguishing mine explosions, and of stemming and safeguarding shots. Prominent among these will be fighting fire. A rock-dusting machine can advance on a small fire and coat the ribs with inert dust till the fire goes out, and it can do this without destroying the roof, as the vapor from water would do, and without generating the highly combustible hydrogen or in any large degree, the poisonous, though less combustible, carbon monoxide. In short, by putting rock dust on a fire the generation of water gas is avoided.

Rock dust not only acts as a fire-fighting tool but protects the mine against the possibility of fire. It whitens and, therefore, lightens the roadways; it protects the ribs and roof against deterioration, and by filling up crevices in the coal reduces air leakage between headings. Electrical fires can be subdued by it with less injury to the equipment than by sand. It is quite probable that, sprinkled on such mine ribs as are subject to spontaneous combustion it will greatly reduce that tendency. Moreover, if limestone dust is used, it has some effect, however inadequate, in the neutralization of the acid waters. Its effect on the transmission of fungus growths from timber to timber and on the development of the spores should they reach the timber is a matter that has not been investigated.

George S. Rice, chief engineer, U. S. Bureau of Mines, first to advocate the use of rock dust in this country, builded better than he knew. Coal men are

(Please turn to page 328)

Impressions of the Ceremonies at Independence Rock July Fourth and Fifth

By H. A. WYLAM, Superior

I HAD the pleasure of being present at three distinct celebrations held at what is known as Independence Rock, about seventy-five miles northwest of Rawlins, Wyoming, these celebrations taking place July 4th and 5th, 1930.

One which interested me greatly was the meeting of the Freemasons on the top of the rock, this commemorating a similar gathering held 68 years ago. There were about five hundred Masons from many parts of the United States present.

The second was the dedication of a tablet in memory of Father DeSmet by the Knights of Columbus, this ceremony being in memory of the priest who brought Christianity to the Western States in the early pioneer days.

When it was made known that a great gathering of Scouts would be held from all over the United States at Independence Rock, Dr. A. Davis, one of the physicians at Superior, and myself, upon consultation with the Scout Master at Superior, decided that we would take a number of Boys from Troop 165, this troop having shown a remarkable growth under the direction of Scoutmaster J. H. Haueter. We therefore decided to attend, and Dr. Davis and myself, accompanied by eight Scouts left Superior at 4 A. M. July 3rd, going by way of Rawlins. The following Boy Scouts accompanied us: Gordon Furness, Senior Patrol Leader, Bill McIntosh, Harold Davis, Leslie Davis, Nels Anderson, Roy Wylam, Roger Richardson and Murdock McLean. After taking breakfast at Rawlins, we drove out to the Rock, arriving there about 10 A. M. and found the camp in readiness and several troops already on the ground.

The Superior troop was allotted a space 30 feet long in which to pitch their tents and park their cars. On looking around we found that the general Scout camp was laid out in the form of a crescent facing the east side of the rock, the rock being about half a mile long and one hundred feet high.

After making camp, we visited Headquarters Tent, and received instructions regarding the rules laid down for the conduct of the camp. The boys were then assigned to their duties, which were two to cook and two to wash dishes each day, alternating so that everyone would have a turn at each of the jobs.

After lunch the bugle sounded Assembly and the boys were given a short talk by Camp Director W. C. Wessel and Mr. Lorne W. Barclay, National Scout Director. Mr. Barclay also announced that Chief Scout Executive James E. West would pay a visit to the boys and they were formed in line to receive him, there being about six hundred boys and a number of Scout leaders and Scout Executives present.

Upon Scout West's entrance to the camp, he was greeted with prolonged cheering from the Boy Scouts assembled. Executive West talked to the boys, greeting them and introducing the several Scout leaders present. The boys were then dismissed, and explored the rock, reading the names cut into its rugged face from the year 1836 up to the present time. With swimming and visiting, the day was pleasantly passed.

After supper, Retreat was sounded, and the Scouts assembled for the ceremony of lowering the flag, after which they were seated on the east slope of the Rock, which made an ideal grandstand, and were entertained by Chief Executive James E. West, the Casper Boys' Band, Dr. Howard R. Driggs, president of the Oregon Trail Memorial Association, and Ralph Hubbard and his band of Indians, who danced war dances, sang Indian songs and told Indian legends till 10 P. M. It is safe to say that no more impressive meeting of Scouts was ever held. After sounding of Taps, all were ready to turn in.

During the night, several more troops arrived in camp. On the morning of July 4th, we found a double crescent of Scouts nearly a mile long where troops from nearly every state in the United States were camped, including one troop of Indians under the leadership of Chief Tecumseh. These Indian boys were about twelve years of age, and had only been organized a short while, but had passed their Second Class tests a short time prior to the celebration.

During the morning there was a great stir about the camp for inspection was by a Regular Army Officer. There was a great splashing in the river, teeth were scrubbed, hair slicked and everything cleaned about the tents. Assembly was sounded, and the raising of Old Glory.

Let by the Casper Band and the Sheridan Scout Drum and Bugle Corps, the Scouts went to the north end of the rock where the officers of the Oregon Trail Association, the Historian of the Church of Latter Day Saints, the surviving Scouts of the '60's, and many hundreds of visitors present were assembled to unveil the tablet to the memory of the man who had originally marked the Oregon Trail and who later organized the Oregon Trail Association—Ezra Meeker. While this was taking place, Governor Emerson, of Wyoming, arrived to talk to the Scouts, he having made a hurried trip from the Governors' meeting at Salt Lake City.

Governor Emerson paid a wonderful tribute to the pioneers who had passed the rock one hundred years ago to tame the wilderness and reclaim the desert. He spoke of the magnificent fortitude with which those pioneers endured hardships, comparing the 12 miles per day of their travel to our modern

speed of 40 to 60 miles per hour by automobile and our 100 miles and more by airplane.

The boys were entertained with some Old West Life by a rodeo put on by cowpunchers from the Tom Sun Ranch. Many of the Scouts engaged in swimming, and suffered great inconvenience from sunburn caused by the brilliant western sunshine. The Casper Municipal Band furnished music throughout the day, and, after Retreat, all Scouts again gathered at the rock, where the Laramie Scouts staged a very fine pageant with the help of Hub-

bard's Indians. There were three covered wagons; the boys were dressed in costumes to represent the time when the pioneers were crossing the plains. The wagons were drawn up in a circle, a fire was laid and the evening meal started by some, while others put out the washing. The old fiddle and a banjo were gotten out, a trapper with his mule and a prospector with his burro paid a visit to the camp, a signal fire was seen on the top of Independence Rock, and the Indians came from the brush about the rock, gathered with the Chief and attacked the



1.—Bear Patrol at Independence Camp.
2.—Casper Boys Building Scout Emblem.

3.—Part of the crowd at the erection of Monument.
4.—Indians ready for attack on camp.

camp. But a party of cowboys later drove the Indians off. The pageant was all very realistic, and the Laramie troop received a great ovation for the manner in which it was put on. Ralph Hubbard then told the Scouts a number of his Indian stories while standing on the rock in silhouette against the Western sky, so that his full Indian dress of feathers and other trappings made a very pleasant picture. A display of fireworks brought the day to a wonderful close.

On the morning of July 5th, another inspection started things moving. Then came Assembly and a fine talk by Mr. Jackson, who was photographer with the Hayden Survey in 1864 and with the Government Survey for several years thereafter. He is now 82 years of age and still in excellent health. Mr. Joseph G. Masters, principal of the Omaha Central High School, followed with a talk, giving the history of the old Oregon Trail and the early doings of Drs. Spaulding and Whitman, who crossed South Pass in 1836 with their wives to do Missionary work among the Indians. Mr. Masters told of the ride made by Dr. Whitman a few years later, when he covered four thousand miles in midwinter from Fort Walla Walla to Washington, D. C., to save the territory to the United States which is now the State of Washington.

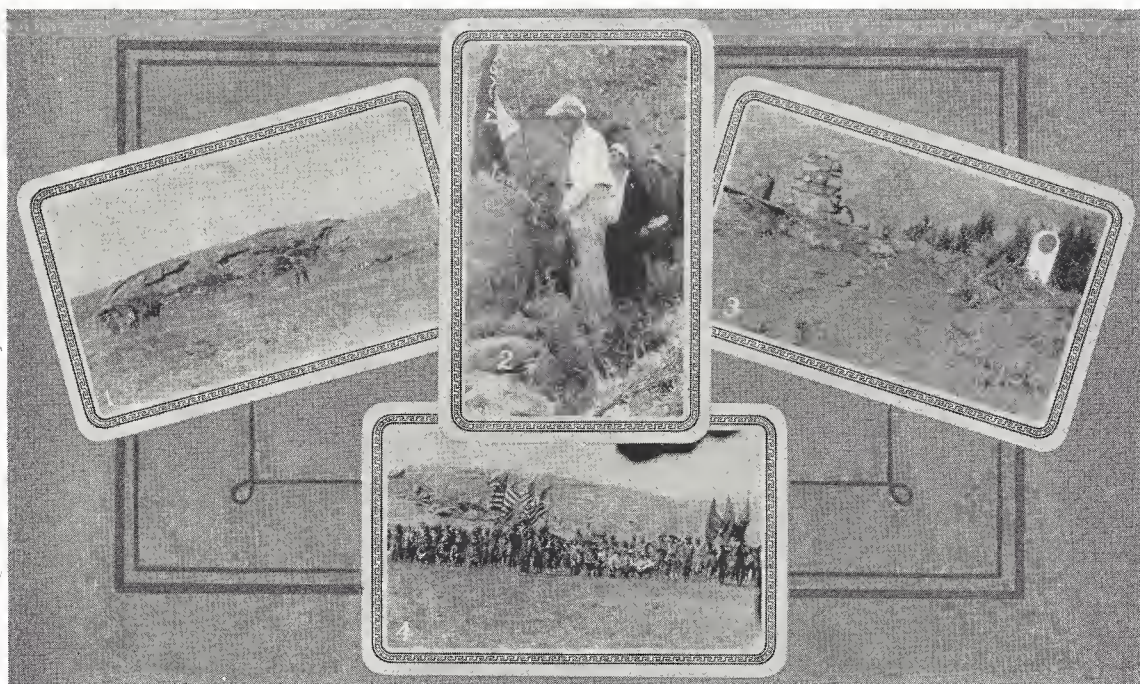
The afternoon was spent in trading souvenirs, the Indian troop seeming to be the best traders. During

the afternoon, the boys, with the help of a mason, erected a monument in which were placed stones from the states represented by the troops. The Long Island Scouts had a very fine white granite stone with a bronze medallion inset of a covered wagon.

At the evening camp fire the awards were given. For the most attractive camp, Salt Lake City was awarded first and Denver second. The Salt Lake camp represented an old trading post with sage brush fence around it. Laramie received the award for the best stunt, the putting on of the pageant. The boys of the Tom Sun Ranch were given the flag that floated over the rock throughout the encampment. These boys were 11, 9 and 7 years of age, and expressed a desire to become Scouts as soon as they were old enough. Several other awards were given and the honor roll read. Superior being eighth on the list, a fact of which we were very proud.

One of the remarkable things about the whole enterprise was, that, despite the large gathering of over eight hundred Scouts and their leaders, not a single accident occurred, testifying to the admirable spirit of Safety First which is being inculcated by the Scout leaders.

The Superior Boy Scouts returned home feeling that they had indeed had a wonderful time and a memorable trip, and an experience which they will long remember.



1.—Looking across arena from camp toward the rock.

2.—Mr. Jackson, the old photographer, watching construction of monument.

3.—Monument on left erected by Boy Scouts. on right by Long Island Troop.

4.—Assembly.

Engineering Department

Humidity In the Home and In the Mine

By C. E. SWANN

(In two parts—Part one, *Humidity in the Home*; Part two, *Humidity in the Mine*.)

HUMIDITY IN THE HOME

WHILE reading a book on "Weather," compiled by P. R. Jameson, (Fellow, American Meteorological Society) for the Taylor Instrument Companies, I was much interested in an article entitled "Humidity—Its Effect On Our Health and Comfort," and, in this article, I have quoted freely from the book herein mentioned.

The variable climate of the United States has led to many devices being developed for the heating of houses, theatres, factories and offices. These devices, as heat producers only, are probably perfect from a mechanical standpoint. The designers and manufacturers of these devices have had in mind the production of heat only, and from a scientific and hygienic outlook their value is not so great as one would imagine.

The air we live in is never perfectly dry. We speak of it as being "dry," "very dry," or "damp," but the dryness is at most only comparative. Watery vapor is constantly being distilled into the air from the great water surfaces—the oceans, rivers and lakes, and a very small percentage from the moist soil.

Moisture, rather than temperature, accounts for those oppressive, debilitating, muggy and uncomfortable days we so often experience in the summer time.

Lack of moisture, as found in the arid region of Wyoming, not only causes discomfort, but accounts for a large percentage of catarrh, colds and other diseases of the nose and throat so prevalent in this region.

Moisture is Nature's great bed blanket to keep her children warm. Take the "blanket" away—or "thin it out" and we all get cold. Without moisture we cannot live.

In our modern inside living temperatures, we are apt to get an excessive amount of heat and an insufficient amount of moisture.

The public is becoming "air conscious" and the idea that ventilation, in the home as well as in the mine, is an all year round health factor is being realized, also that ventilation is more essential in cold weather than in summer. When windows and doors are shut, the indoor worker is more prone to fatigue and illness from breathing foul air.

Most winter sickness can be traced to improper

ventilation. eminent physicians say, because the great content of carbon dioxide in foul, stale air weakens the system, so that it is more susceptible to disease germs. Air of low relative humidity exerts a tremendous drying effect on the human body, and causes winter ailments such as coughs, colds, grippe, influenza, depression and lassitude. The public already realizes the fact that fresh air is just as necessary to every-day efficiency as pure water and good illumination.

The three terms used in referring to moisture in the atmosphere are: Absolute humidity, relative humidity, and dew point.

The amount of water-vapor in the air (when expressed in the number of grains per cubic foot of air) is called the absolute humidity; when expressed in the form of a percentage, it is called relative humidity.

The relative humidity depends chiefly on the temperature of the air. If we make moist air colder, we shall increase its relative humidity without increasing its absolute humidity. If it is cooled sufficiently, its relative humidity will become 100 per cent, which is saturation.

Heat as indicated by the thermometer is not at all the solution of the problem of "warming the house." The healthy human being maintains an internal constant temperature, if he be in the tropics or at the poles. Irrespective of surrounding temperature conditions, the human body is always throwing off its excessive heat to the surrounding air.

To be at all comfortable or to feel "comfortably" warm, we must see that the heated air has in it the proper percentage of moisture. In the average heating device no provision is made for moisture; when it is, it is so insufficient and inefficient that it can be entirely disregarded.

Nature, except in a few isolated instances, provides us with sufficient moisture to enable us to live comfortably in natural conditions. Habits in the last century have produced today a race of people extremely sensitive to heat and cold. Luxuries have now turned to necessities and with them we have to adjust our bodies to meet existing conditions.

Surely our houses are positive proof of this. The average temperature of the average house in winter is at least 72 degrees Fahrenheit and often quite in excess of this. This makes living conditions positively dangerous, as we will see.

In Rochester, N. Y., the average January outside temperature for the past 30 years is 24 degrees Fahrenheit. The average humidity for the same period is 78 per cent. This means that the air is 78 per cent saturated with moisture. The average

house temperature is, let us say, 72 degrees, and certainly the humidity in the winter under ordinary heating conditions never exceeds 22 per cent.

Air which is low in its percentage of moisture is a great drier. We know this, for we hang clothes in the air so that the gentle winds can steal their moisture; sometimes with delightful rapidity, at other times without any success at all. A laundress knows this is a fact, but is ignorant of the scientific reason.

Let us take a sponge, for example. We know well that a sponge can hold only so much water and that when it becomes saturated and more water is added, it "leaks," so to speak. The drier it is the more quickly it takes up the water. So with the air. "Dry air" will steal moisture and hold it, far more rapidly than "moist" or "very moist" air.

We must not imagine that air will always take up the same amount of moisture. It will not. It depends upon its temperature. Cold air will not carry as much moisture as warm air.

It is easy then to see that if our rooms, without any artificial heat in them, have a temperature of say 40 degrees Fahrenheit, and are warmed up to 70 degrees Fahrenheit or above, without the introduction of additional moisture, conditions are distorted seriously, even dangerously, as the percentage of saturation decreases with the increase of temperature. We may have 70 parts of water in the air at a temperature of 40 degrees, and when this temperature is raised to 70 degrees by certain heating methods, the percentage of saturation is probably reduced to about 20 parts.

We know that dry air steals moisture and that warm air can take more moisture than cold air.

What, then, is the result of these manufactured heating conditions? The warm, dry air of the room steals the moisture from our bodies—dries us out, as it were—the same as wet clothes are dried out on the clothes line. In other words, the moisture of our bodies evaporates into the air very rapidly at the surface of our skin. As evaporation causes the loss of heat, it is quite easy to see why we feel chilly, cold or uncomfortable with the thermometer up in the seventies.

In the summer, with the thermometer at 70 degrees, we have sometimes noticed how excessively hot it seems. Yet in the winter, in our homes, with the thermometer at the same point, we sit with windows and doors shut tightly to keep out the cold air, and shudder. The reason for this is the great amount of moisture in the air in the former instance, and lack of it in the latter.

With a great amount of moisture in the air, perspiration does not evaporate quickly; that is, the very moist air cannot dry up quickly enough the moisture thrown off by the body. This prevents our body throwing off its excessive heat, and, as a consequence, we feel it as heat. If it is thrown off too rapidly, we feel it as cold. We cannot successfully dry clothes in the air on a damp day.

Excessive dryness has a startling effect upon the

lungs and the delicate lining membrane of the throat and nasal passages. These passages are affected to such an extent that breathing is impeded and the tendency to disease developed.

The moisture in the air is like a great bed blanket. Take it away and we feel cold. Increase the heat and we feel colder, for evaporation from our skin increases.

The air of houses or rooms, public offices, theatres, etc., heated to this severe degree, besides seriously affecting the health of people in them, will shrink and damage furniture, books, pictures, etc. Cracks in the cabinet work of houses, and the checking of furniture are caused solely by the dry air drawing out the particles of moisture.

We can go to almost any museum or art gallery in the country and find that when rooms are heated by artificial means, great attention is paid to the moisture conditions, for a picture worth thousands of dollars would be fit only for the scrap heap if it became "dried out"; the paint would strip from the canvas, and as an art treasure it would become worthless. Do we pay more attention to antique furniture, pictures, mummies, etc., than we do to our own bodies? It certainly seems so.

Authorities have truly stated that 25 per cent of the cost of heating our houses has been expended in raising the temperature from 62 degrees to the unhygienic 72 degrees Fahrenheit.

Who has not complained in the winter time of a room being too cold at 65 degrees, and yet in the spring or summer such a temperature is most comfortable.

The solution lies in the moisture. A room at 65 degrees, with a very small percentage of moisture in it feels a good deal colder than a room at the same temperature with a greater amount of moisture. Accordingly we oftentimes sit out of doors in comfort when inside at the same temperature we shudder with the cold.

The common practice of looking solely at the thermometer as an indication to health and comfort is therefore inadequate and very misleading. We have plainly seen that the temperature at the same point produces varying sensations of cold and heat, depending on the amount of moisture in the air. It is ridiculous to lay down a fixed standard of temperature for comfortable living, without due regard to the moisture. Study the hygrometer also.

Apparatus of various designs, all supposed to increase moisture percentage in the house, have been brought out from time to time.

Mr. Jameson has found that one of the most satisfactory ways to "humidify" a steam-heated house is to place a rough, thick, soaking wet towel—preferably a bath towel, on account of its size and texture—over the radiator and leave it there long enough to dry out. It can then be moistened again, and as many times as desired. If hung over the back of the radiator, it will not be so unsightly as one would imagine.

If the air is used for heating, a possible way to moisten it is to open the register and put in a lot of soaking wet muslin, such as an old sheet, and allow the heat to pass by it, so that the air, instead of being delivered dry into the room, is moisture laden.

Of course, the most satisfactory method is to have some contrivance in the furnace jacket itself, such as pans, where the water surface will be large and the evaporation rapid. Twenty gallons a day has been evaporated by this method.

By these means the percentage of moisture has been constantly held at 54 per cent when the temperature of the room has been 66 degrees or a trifle over.

Don't attempt so much to increase the heat, but give more attention to the moisture.

Even boiling a kettle in the room will increase your comfort, but the carrying out of such an idea is not always practicable.

With all our attempts to improve health by lectures on the subject, standardization of food products, medical treatment, etc., it is amusing to note how very uninterested a great many people really are, for they complain that, "to moisten the air makes the windows sweat." It is quite true this happens, but surely some of us still remember the winter morning when our windows were frosted inside because there had been moisture in the air and it had condensed on the cold panes and frozen.

If "sweaty" windows are an excuse for not having rooms properly moistened, it is time to realize that double windows will remedy the "sweat" and are much cheaper than new noses and throats.

Our present methods of heating produce an extremely "dry" heat, making it practically impossible for condensation to take place.

We're surely more thoughtful for our little inside plants, or ferns. You have often said, "this room is too hot for this plant," little thinking that it was rather "lack of moisture" than excess of heat. You cannot grow many plants in the temperature zone in dry sand, for that is practically what earth becomes when it is devoid of moisture, and is what it becomes as regards its growing qualities in our manufactured inside living climates. When plants droop, we water them—give them more moisture—just what we need ourselves.

The slightest motion of over-heated air (when it is chilly and dry) causes an immediate search for suggested draughts, but when the humidity and the temperature are correct, or in balance, most comfortable conditions exist, for the air feels warm and balmy, the feeling of oppressiveness disappears and an indescribable sense of relaxation and poise immediately takes possession of us.

The cooling effect produced by a wind or draught does not necessarily arise from the wind being cooler, for it may, as shown by the thermometer, be actually warmer, but arises from the rapid evaporation it causes from the surface of the skin.

Authorities agree if we were to stop having our

"climate" indoors (in winter) the driest climate known, and kept it at a humidity of 65 per cent, we would be comfortable at 65 to 68 degrees temperature, save money and avoid sickness. Certainly the subject deserves consideration.

Water-vapor in some shape forms, as it were, a blanket for the earth and saves it from being burned up and frozen alternately.

(End of Part One.)

Early Contributors to Electrical Science

By D. C. McKEEHAN

IN A previous article I defined the Gilbert as the necessary pressure to force magnetic lines through iron, air or other material.

Consider for a moment an ordinary horse-shoe magnet with imaginary magnetic lines leaving the north magnetic pole into space and entering the south magnetic pole. A single one of these imaginary lines is called a Maxwell, which is, thus, a single unit of magnetic force. The total strength of the magnet is represented by the total number of lines or Maxwells, commonly called the total flux.

If there is but one magnetic line per square centimeter, the magnetic density is referred to as one Gauss. The Gauss being the unit of magnetic density or magnetic intensity of the field.

A Maxwell should be understood as a single magnetic line while the Gauss refers to the density with which the lines are massed in a given area.

It is possible to assume that a certain iron core is magnetized to an intensity of 80,000 Gauss per square inch, and by using this figure in computations such as transformer and solenoid design it enables the designer to determine the proper number of turns of wire for a given voltage.

James Clerk Maxwell, after whom the unit of magnetic flux was named, was a Scottish physicist, born in Edinburgh in 1831, died in 1879. His first published scientific paper, "On the Description of Oval Curves," was presented before the Royal Society of Edinburgh before he was fifteen years of age. He held many professorships, and in 1871 was the first professor of experimental physics in the University of Cambridge.

He demonstrated that electromagnetic action travelled through space in the form of transverse waves similar to those of light and having the same velocity. His theory was later corroborated by Hertz, who not only produced these waves, but showed that they are propagated just as light waves and experience reflection as well.

Among his inventions are the Maxwell disks and color box. He showed that any color could be produced by the combination of three colors selected from the spectrum. These three fundamental colors would correspond to three different sets of nerves or sensations in the eye, each excited proportionately

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Green River Celebrates the One Hundreth Anniversary of the Opening of the Oregon Trail in Wyoming

Contributed.

THE old and the new blended harmoniously at Green River when, on July 4th and 5th, was held a celebration commemorating the centenary of the opening of the Oregon Trail through Wyoming when intrepid men and women were journeying westward into the new country to make themselves new homes in the wilderness.

The progress of one hundred years was very forcibly and splendidly represented in pageantry at the celebration. On the morning of the 4th people began to pour into the town, the crowd being in strong contrast to that of one hundred years ago, when the slow moving ox wagon and the horse-drawn vehicle were the only means of transportation. On July 4th this means of transportation was practically absent, the more modern automobile being in evidence everywhere. In place of the hardy pioneers of early days, dressed in buckskin, those representing many nations and modernly dressed were everywhere in the city.

On the morning of July 4th, a large bombing

plane, piloted by Lieutenant Eddie Brooks, of the National Guard Air Squadron of Denver, arrived. Mr. Brooks was accompanied by a staff writer of the Denver Post, sent to write up the celebration for his paper. Private aeroplanes were also in evidence, and, as they circled the town, they were a marked contrast to the medium of transportation that the early pioneers used.

The combination of the old and new occurred on Saturday, July 5th, when contrast could be made between the two as the parade wended its way through the Green River streets. The parade was led by the great-great-granddaughter of Sacajawea, the Indian princess who saved the Lewis and Clark Expedition from hostile Indians in 1804. Sacajawea's descendant is named Bernice Burnett-Twitchell. Following her was the covered wagon train, the first wagon being driven by Jim Barrett, the first white boy born on the site of Green River. Many ladies, dressed in the fashions of the sixties, were in the procession. They were followed by the old hand carts used by the Mormons as they pushed their way through the country. A placard stated that the carts had traveled the 1,300 miles in 103 days. There were a number of burros in the procession, carrying heavy packs, and the inevitable prospector limping along. An old carriage, which had been resurrected from Fort Bridger and brought to Green River, carried General Samuel Harney and his eastern bride. It was in this carriage that General Harney and his bride made the long trip from St. Louis to Fort Bridger. On an attractive float rode Betsy Ross, who created Old Glory; this was one of the finest floats in the parade. Then there was the shop group of the Union Pacific Railroad, led by General Manager N. A. Williams and Superintendent H. A. Connett. The miniature Union Pacific Train was also in the parade. There were cowboys and cowgirls; the Drum Corps of The American Legion of Rock Springs and Green River; McAuliffe's Kilty Band in full regalia; The Union Pacific Coal Company Band of Rock Springs and the Green River Cowboy Band. In the parade were many old timers, including Jim Cassidy, 80, and Mrs. Emma Philbrick, 81, who came to Green River long before the railroad, and who rode the first stage into the South Pass country. Mrs. Caroline Eggs, operator of one of Green River's early hotels, was also in the parade.

A complete line-up of the parade is shown below: Pioneer Tom Welch, Marshal of the Day.

Guide—Bernice Burnett-Twitchell, the great-great-granddaughter of Sacajawea, the famous Indian Maiden who saved the Lewis and Clark Expedition from starvation and annihilation in 1804.



Bernice Burnett-Twitchell, Indian Princess. Descendant of Sacajawea (guide of Lewis and Clark Expedition.)

First White Child born in Green River—now oldest native—acting as driver of Covered Wagon—with large family.

Patsy Payson as Old-Time Cowgirl—pinto horse, side saddle, divided skirts and old-time wrappings and headgear.

Union Pacific Railroad Company's famous Miniature Passenger Train, operating on streets.

Eber Gregory's Burro Train—with full pack saddles and full prospectors' and gold-washing equipment.

Latter Day Saints Hand Cart Brigades.

Bands and Drum Corps from Wyoming and Utah.

Bag-Pipers and Clown Bands—Fraternal Bands.

Covered Wagons, Ox Teams, Mule Teams, Bull Whackers, Ox Carts, Buggies, Pony Express Riders, Cowboys and Cowgirls.

Floats by Historical and Educational Societies.

Floats and Displays by Fraternal Organizations, Business Firms, etc.

After the parade there was speaking at the Ball Park by Mr. T. S. Taliaferro, Jr., who delivered an inspiring address. No one is more fitted to do this than Mr. Taliaferro as he is extremely well informed

on the early history of Wyoming. Mr. Taliaferro told of the coming of the early pioneers, of the exploits of Jim Bridger, stating that he led a party of government officials to the present site of Rock Springs and showed them the coal measures. Later in life he went over the route of the Union Pacific with General Grenville M. Dodge, suggesting a location which is very close to the present line of The Union Pacific Railroad. Mr. Taliaferro made a strong plea that Jim Bridger's memory be perpetuated in Western Wyoming, by placing a statue in Green River, commemorating the many things he did for the development of this part of the country.

There were ball games, and, in the new pavilion which has been erected at Green River, dancing was carried on a greater part of the afternoon and evening of both days, tremendously large crowds participating.

It is safe to say that no more colorful or ambitious program was ever held in this vicinity and the members of The American Legion Tom Whitmore Post, in Green River, are to be congratulated on the success with which they handled the entire situation.

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1.—The coach driven by General Samuel Harney and his bride from St. Louis to Fort Bridger.

2.—The float of North Side State Bank, Rock Springs, which captured First Prize.

3.—Dave Rude (representing Abraham Lincoln.)

4.—Green River ladies who occupied the covered wagons, etc., in parade.

5.—Left to right: William Evers, Mayor; Mike Maher, Chief of Police; Thos. Rogers; Al Morton, Sheriff.

—≡ Ye Old Timers ≡—

Catherine McArdle of Hanna

Miss Catherine McArdle is the aunt of "Doodles" McArdle, one of Hanna's First Aid heroes. She came out to Hanna from England some five years ago, and has already endeared herself to a large circle of friends. She likes Hanna so well she plans to stay and to qualify as a Hanna Old Timer.



Miss Catherine McArdle of Hanna.

She is always cheery and ready with a sprightly exchange of stories and fun. She is a devout member of the Roman Catholic Church and is interested in the Moose Fraternal Lodge.

Mrs. Hanna Milliken

Mrs. Hannah Sutton Milliken, resident of Hanna and one time Carbonite, was born in Nottinghamshire England, sixty-six years ago. She came to the United States when she was only fifteen months.



Mrs. Hanna Milliken

Her parents settled in Old Carbon, when she was just a young girl. There she met Mr. John Milliken who was a prospector and had been a member of one of the covered wagon trains on the trip West, before the railway came. They were married when Mrs. Milliken reached her eighteenth birthday.

Mr. and Mrs. Milliken kept the

Amusement Hall of Old Carbon, the ruins of which are still known as the "Old Carbon Opera House." It was here that Mrs. Milliken raised her family of nine children of which the three boys, William S., Robert S., and Johnny all reside in Hanna. Five daughters are living to fondly remember a fine mother, Mrs. Oscar Peterson, of Los Angeles; Mrs. A. F. Hill, of Ogden; Mrs. H. Challender of Hanna; Misses Jean and Dorothy of Hanna. Another daughter died some years ago.

Mrs. Milliken has twenty-three grandchildren and one great-grandchild. She voted when Wyoming was a Territory.

She is a member of the Methodist Church of Hanna to whose service she is constantly devoted.

An Old Timer

In this log cabin (located on Slate Creek, near Atlantic City, Sweetwater County, Wyoming) is a stove bearing the following imprint:



Manufactured June 15, 1855,

Charter Oak 1808

Filley's Patent Hot Air Flue,

C. F. Filley, St. Louis, Mo.

This 75 year old stove was hauled from Missouri into the South Pass country by ox-team and is still available for use. Its first home was where the fireplace stone now stands and later was removed to the crude cabin where it has served faithfully and well all these years.

The couple shown in the cabin photo is Frank Charter and wife, Tippleman at Winton for a period of 7 or 8 years past.

The History of Tono

By BYRD FRIEND—*Eighth Grade*

Everyone is interested in the history of the town in which he was born and raised and so I was very glad to be assigned this topic by Mr. Ingersoll as it gave me an excuse to spend an evening questioning my father and mother about the beginnings, and progress of this town. I could not possibly tell you everything my father said but the following is a summary of it.

In 1872 a man named Sumner took up a homestead where the Tono mine and town are now located. Mr. Sumner cleared part of the land and raised hops and also planted an orchard and built a house and barn. When Mr. and Mrs. Sumner passed away the homestead was willed to their youngest daughter from whom the Washington Union Coal Company bought this property in 1907. Their house is still in Tono and is occupied.

My father, Charley Friend, was one of the first men on the job when in June of the same year they opened the mine. In the beginning there were only about a dozen men and three families living here. Late in the fall the company built a few more houses and by that time there were seven or eight families here.

In 1908 a railway was built into Tono from Centralia so that the coal could be shipped out. When the outside people heard of the mine in Tono they rushed in to get work in the mine. These people required houses to live in so more houses were built and also a town hall, hospital, office, store and later on a nice school house.

During the first few years of Tono's existence school was kept in a one room schoolhouse (and it wasn't red either). Several of the first Tono pupils still make their homes here and have children attending the present day Tono School. They are Phoebe Martina, Jimmy Clark and Charles Way. Others who are still living here and got part of their schooling here are Mr. and Mrs. Bert Boardman, Mrs. H. Olson, Mrs. John Hudson, Mrs. Dave Hall, George Clark, Todd Dove, Joe Mossop, O. Onkat, Wilbert Friend and Mr. and Mrs. Horace Gonderman.

Pioneers who were here at the beginning of the town and are still here are my father and mother, Mr. and Mrs. Charley Friend, Mr. and Mrs. Robert Clark and Mr. and Mrs. E. C. Way.

The Tono of today, of course, is an entirely different place than that of a few years ago. The old plank road which kept Tono almost isolated from the rest of the world and caused lots of grief has been replaced by a well kept graded road and Centralia, Olympia, and Tacoma are, in point of time, only a few minutes distant. Houses have been modernized, electric lights put in, daily mail delivery established, a public library organized and a Women's Club House built.

The Old Timers not here any more would certainly be surprised if they could walk in on Tono now.

John McTee, Sr. Passes

The people of Rock Springs heard with deep regret of the death of John McTee, Sr., which occurred at his home Friday, May 16th. Although Mr. McTee had been ailing for some time, his death came quite unexpectedly.

Like many of the early miners, Mr. McTee was born in Scotland and grew to manhood there. Soon after his marriage, he came to America, staying but a short time, and returning to his native land. In 1880 Mr. McTee and his family again returned to the United States, settling for a time at Oglesby, Illinois, coming to Rock Springs in 1886. From that time until his retirement, in 1926, Mr. McTee



John McTee, Sr.

worked continuously for The Union Pacific Coal Company. He was extremely proud of his long service with The Coal Company and was a devoted member of the Old Timers Association.

Just before his death he was looking forward and planning to be present at the sixth anniversary of the Old Timers meeting.

Jimmie Murphy and Tom Lafferty, now deceased, were great pals of Mr. McTee. From the time of Mr. McTee's coming until the death of his pals, they were inseparable companions; it was hard to find one without the other.

Mr. McTee saw Rock Springs grow from a small mining community to a modern town. Instead of spending much time in contemplating the "good old days," he found a great deal of pleasure in the modern surroundings and better living conditions that came in his later life.

The family requested that Mr. McTee be buried from the Old Timers Building. This was particularly fitting because of the fact that this building had been dedicated to the Old Timers of The Union Pacific Coal Company. The funeral was largely attended. The ritual of the Episcopal Funeral Service was read by Rev. R. E. Abraham and the vested choir of the same church sang the hymns, making a wonderfully impressive service.

The United Mine Workers of America, of which

Mr. McTee was a member, united in paying their respects, using the Burial Service of their order at the grave.

Thus passes another Old Timer who did much for the community in which he lived and died with the love and respect of the entire community.

Old Timer Peter McMahon, Dies

We regret to record the death of another Old Timer, which occurred at Rock Springs July 13th, 1930.

Peter McMahon entered the service April, 1888, when Rock Springs was a very small mining community. His first employment was in No. 5 Mine, then in No. 1, No. 4, No. 7 and No. 10 Mines.



Peter McMahon

The deceased leaves a widow and 12 children, three of whom are employed by The Union Pacific Coal Company.

On May 1, 1927, Mr. McMahon was retired on account of failing health, since which time he continued to reside at Rock Springs.

The funeral was held at Rock Springs July 17th, and was conducted by the members of the Mormon Church. A large number of the Old Timers were present at the funeral services to pay their respects to one whom they had known and respected for so many years.

Old Timer K. Nishimura

By SHIDSUO IKUNO.

Born in Nagasaki, Ken, Japan, in 1874, Mr. K. Nishimura or "Nishy" as we all knew him, had been to America several times as a sailor before he made up his mind to make the United States of America his home. After a few years' residence on the west coast, he was recalled to Japan by the death of his father. However, as soon as he was released from duties there he came back to America, bringing his young wife with him.

When they reached San Francisco, Mr. Nishimura went into the hotel business, but soon tired of the location and moved on to Nevada. He worked for some time in the mines there before coming to Wyoming.

In Wyoming he found the place he wanted to call home. He was a loyal member of the community of Rock Springs, and one of the best known characters in it. For twenty-five years before the illness



Mr. and Mrs. K. Nishimura and Nishy, Junior, on an outing in the hills.

which caused his death, he had been in the service of The Union Pacific Coal Company. He was a member of the Old Timers Association, and had missed none of the annual celebrations.

During a bad snow storm in January he had suffered an infection in his foot which had been broken when he was a youth. Two weeks before he died "Nishy" was taken to the hospital for an operation by which it was hoped to keep the infection localized. It was thought that he was recovering and "Nishy" began to talk of a trip he planned to make, to see his sister in Japan during July of this year. His illness, however, took an unexpected turn and he passed away on Thursday morning, April 17th.

The sympathy of his many friends goes out to his widow and adopted son. We say "Peace to his ashes," which have been sent for reposal in a sacred depository in his native Japan.

Mrs. Nishimura departed in July for her native land, where she will visit scenes of her childhood, returning to Rock Springs toward the close of the year. The small boy was left here with relatives.

By-Products of Rock Dusting

(Continued from page 317)

only just beginning to learn what rock dust will do. Probably its introduction would have been delayed long, if not forever, had it served only these minor uses, but once installed its byproducts have become manifest.

—From Coal Age.

Knowing Wyoming

FOREST fires in the the vicinity of Encampment, on the western slope of the Medicine Bow National Forest, did irreparable damage during July, burning over thousands of acres of timber lands. Hundreds of men from Laramie, Hanna, Rawlins and other points in Wyoming, besides many from Colorado, fought the flames under the supervision of Government Forest Reserve officials, finally gaining control after a week's stubborn fight.

City officials of Rock Springs were recently acquitted in the Federal Court at Cheyenne of conspiracy against the government, the jury after deliberating less than one hour returning a verdict that Uncle Sam had not proven his case.

The "Southern Cross" plane, in charge of Commander Kingsford-Smith, of Australia, flew low over the city one recent evening, en route to Oakland, California, where was completed a "round the world" flight. Many witnessed the large "black-bird" with its painted in red sign "SOUTHERN CROSS," and, in future years, can tell others they saw the plane which crossed the Atlantic from Ireland to Newfoundland in the year 1930.

Corner lots in Jackson have gone "out of sight," four to five thousand dollars being asked for locations. The town has "growing pains" since the arrival of the Fox "movie bunch" of several hundred which is visualizing the "Oregon Trail" of olden days, all the cowboys for miles around being engaged for the pictures. The business men have even started a Lions Club and the town will soon become a "metropolis." Much Rock Springs money is being invested there.

A "Students' Welfare Foundation" is in the process of making, the object of the fund being to provide an opportunity to worthy boys and girls of Wyoming to secure a college education at our Laramie University. Our former Superintendent of Schools here, Oscar C. Schwiering, seems to be at the head of the movement. Several meetings have been held in Rock Springs and approximately \$5,000.00 has been locally subscribed, the total amount of the fund already assuming large proportions, viz.: \$80,000.00. Worthy students may borrow from this fund and scholarships will be provided from the principal and interest. Other state and private seats of learning are heavily endowed, but, due to our lack of millionaires in this section of the country, the Wyoming institution is woefully in the background. Won't some good Samaritan kindly step forward and donate a million, thereby endearing his name to the needy and pro-

ably get his bust or statue in the Wyoming Hall of Fame?

Gray sandstone, much in demand in earlier days but not quarried for many years past, is to be furnished for use on the addition to the State Penitentiary at Rawlins. This sandstone entered into the construction of our Capitol building at Cheyenne, other edifices at Denver, Kearney, Neb., San Francisco, etc. The quarries are a short distance out of Rawlins.

An artificial larynx, for use by those who have lost the power or motion of speech through surgical operations, has recently been invented. Demonstrations have been held in many of the cities of the West before large and enthusiastic audiences, one at Helena, where an old miner (71) by the name of Anthony Kratley, who had lost the use of his larynx (the upper part of the windpipe), was given an opportunity to test the new apparatus. This man, had not spoken for several years, but, after a little practice, formed such words as Pennsylvania, Philadelphia, etc. Arrangements were immediately concluded for the purchase of an artificial larynx for Mr. Kratley and he will shortly be able to discard his pad of paper and pencil. Truly an age of progress.

Numerous movie stars have purchased dude ranches in and around the Southern boundary of Yellowstone Park and also in the vicinity of the new Teton National Park. Hope Williams started the movement, it is revealed to us, and Gary Cooper now has broad acres in an adjoining state to the north, Julian Eltinge operates a dude ranch in "Sunny Cal," while Ed Wynn is arranging for one in the Centennial State. Not to be outdone by the movie and stage celebrities, the Universities are getting busy "on location" too. Michigan University also owns a big tract there with cabins to accommodate some fifty or more students whose summer duties are to geologize (for practice) on the mineral, flora and fauna of the northwestern portion of our state. Vermont sent out a party of twenty-five students and professors to tour our country along the same lines. Wisconsin likewise had a recent party afield traveling by truck (covered wagon).

Our last holiday (4th of July) commemorates our independence of Great Britain. Millions of dollars are spent each year in exploding firecrackers, sending up rockets, etc., etc., fires caused by these methods of recklessness costing hundreds of thousands of dollars additional, while over 400 lives were snuffed out by accidental discharge, etc., and thousands injured and crippled. When will we learn to be safe and sane?

If you did not visit either Teton or Yellowstone National Parks during this year's vacation, you

should make sure your plans for 1931 are not frustrated. The last mentioned park is recognized, in the parlance of the advertising men, as "the greatest natural wonderland and summer playground in the world." Teton facilities, of course, are yet on a small scale but one can be accommodated without going too far "off the course." Bring your trusty kodak along, and, months after your return home, a strange fascination will take possession of you to just look once more at those pictures of the Great Falls of the Yellowstone, the geysers, the paint pots, the great hotels, lakes, forests and the wild animals which abound there. "Know your own state," should be the slogan, and, from a look at the map, you'll note the Yellowstone is almost entirely in Wyoming.

Miss Jessie McDiarmid, Editress of the Employees' Magazine, Resigns

Miss Jessie McDiarmid, who has been Editress of The Union Pacific Coal Company's Employees' Magazine, has given up this position, returning to her home in Winnipeg, Manitoba, Canada, where she will spend the summer with relatives. In the fall, she will enter the University of Chicago, taking a course in Journalism.

Miss McDiarmid, in addition to her duties as Editress of the Magazine, was director of the Girl Scouts in Southern Wyoming, having organized troops soon after her arrival here. Under Miss McDiarmid's direction, the number of Girl Scouts has increased tremendously, there being at the present time, about two hundred registered Girl Scouts in this vicinity, the increase being largely due to the enthusiasm which Miss McDiarmid put into this work.

The growing number of outsiders who have requested that the magazine be sent to them exemplifies the reputation that the Employees' Magazine has made for itself under Miss McDiarmid's direction.

Many friends of Miss McDiarmid here, and in The Union Pacific Coal Company organization, will wish her continued success in the new line of work which she is taking up.

Prior to leaving Rock Springs, Miss McDiarmid was entertained at many social functions here, and in the adjoining mining districts where she had worked so successfully with the Girl Scouts.

Anniversary of Opening of Oregon Trail

(Continued from page 325)

tion, no accident or untoward event occurring during the entire celebration.

In closing, we venture to say that there will be a dearth of whiskers in Green River after the celebration as those on committees and those who participated in the celebration were required to grow whiskers, and there were whiskers of all styles and colors.

The Kaffir Lawyer

THE following story, clipped from a British newspaper, contains so much of that which is kindly and human that we reproduce it as published:

On the windows of a corrugated-iron building in the slum district of a South African city the legend, "Stanley D. Maroko, Solicitor, Notary, and Conveyancer," is painted in slightly crooked lettering. Far away from the skyscrapers where the white lawyers carry on their practice, the little office has as its neighbour the studio of a native photographer and a shop where a Bantu cobbler makes rubber sandals out of old motor tires.

Looking at the glass case that displays black-faced wedding groups in European clothes several of Mr. Stanley D. Maroko's clients stand waiting in the sunshine of the dusty street. A half-caste woman in a black dress and with a red cloth wrapped over her woolly curls holds the hand of her small son, who wears nothing but a pair of ragged trousers. Next to her is a dignified, elderly Swazi, draped in the blanket customary in the kraals, while a pair of his wives, round whose naked arms and legs are several dozen rings of ornamental copper, squat cross-legged on the kerb.

Through the windows of the office comes the sound of the solicitor's black typist tapping at her machine. None of the clients say much, for they are too busy admiring the kid-gloved and top-hatted natives on the photographs.

"My son," presently mutters the old warrior, "works for a moruti (missionary). He has a bigger picture than any of these, and he stands in the middle of it. He brought it to my hut when he came from the kereke (church) to see me."

Before the wives can shout their corroboration the paint-blistered door of the building opens and Mr. Stanley D. Maroko lets out a respectable-looking young Bantu mine clerk, dressed in blue serge and with a large bandage round his arm.

"You will get no money if you go to court," says the Zulu practitioner, smoothing his neat grey suit. "You must not call your friend a wizard. Go in safety." Then he beckons in the Swazi.

Respectfully saluting the young Bantu girl in the tennis frock who sits at the typewriter in the stuffy room, the tribesman enters, followed by his wives. The stenographer wears a hat over her kinks although she is indoors. For a moment the savage watches her in silent amazement copying from her notebook into the machine. "Muti! (magic). The wise counsellor's young she-calf works with muti," he compliments the maiden.

Maroko takes a chair at his desk, but the Swazi, like his wives, prefers to sit on the floor.

"The big hippopotamus must give me advice," he declares. "My words must be heard by the Abalungu (European) judge."

"What are your words?" demands the solicitor, starting to write a memorandum.

"Tsipedi owes me three cows on the dowry of the

eldest daughter of my left-hand wife. You must tell the Kumshna (native commissioner)."

"That will cost you five pounds of money." Stanley holds up the fingers of one hand to indicate the number.

"I have gold here which the Majuta (Jew) gave me for my maize." From a snakeskin pouch carried by one spouse in her beaded girdle he takes a fistful of sovereigns.

The lawyer picks out five of them, and scribbles a receipt. "This paper," he explains, "shows that you have paid me."

"You are honest," answers the native, "and your she-calf looks fat and beautiful like a moon." Such flattery is too frequently uttered in Maroko's office to excite either him or his typist. Briskly he starts taking details required for a summons in the Native Commissioner's Court.

Having written down a number of the old man's statements, Mr. Maroko explains: "You will have to make an oath that what is in this paper is true."

"An oath? What is that?"

"You must swear by the Umkulunkulu, by the Bigger than Big, that you have told only what has happened."

"It is so! It is so!" cries the client as he turns to his wives, who nod their sleek heads in unison.

"To-morrow I will have made the paper. Then you will put your cross on it."

But the Swazi shakes his head. "Am I a witch-doctor that I can draw marks?" he demands. "How can I use your writing-stick?"

Stanled D. Maroko is reassuring. "If you hold one end of the pen the law will let me make the cross for you. Come to-morrow when the sun is there," he points over the roof of a slum church.

"Yes, my father," exclaims the eager native and marches from the office ahead of his wives.

In the street a white lawyer is waiting. Out of respect for his colour the half-caste woman lets him go in first although he arrived after her.

Amusedly the European inspects the black typist and Maroko's framed admission certificate granted by the Supreme Court. The Zulu says, "Good-day" rather awkwardly, for he seldom meets a white colleague.

"About that writ of execution," starts the latter. "You'd better withdraw if you don't want to land your client in costs." He, too, feels embarrassed, for he does not know how to address a black man with an education.

"Will you please sit down?" Maroko is afraid that the European may take offence at such an invitation from a coloured person. But the white solicitor willingly takes a chair and Stanley feels glad.

Across the desk the two slowly talk about the case. The native does not want to show that he thinks his skin a disability. The white man adopts a self-assured but conciliatory manner of speaking. While they converse the lawyers curiously study each other. Miss Mtiso has stopped typing.

After ten minutes a settlement of the legal action has been arranged, and the European takes the hat

he absent-mindedly doffed during the interview.

"Good-bye, Maroko," says the white solicitor at the door.

"Good-bye, Mr. Spencer." They would never shake hands, but they take a friendly leave as the Bantu calls to the colored woman, "Come inside, Mrs. September."

Early Contributors to Electrical Science

(Continued from page 323)

to the amount of its appropriate color in the compound color. The absence of any one set of sensations would occasion color blindness.

Maxwell's studies in electricity and magnetism anticipated, purely from a mathematical standpoint, the development in radio communication that we have today. Early in this century the term Hertzian Waves was applied to what we now call radio waves.

Karl Fredrick Gauss, a German mathematician, was born in 1777, died 1855. Like Gilbert, he conducted extensive observations on the earth's magnetism, and erected a magnetic observatory free from iron where he carried on his investigations. The instruments and methods due to him are substantially those employed in the magnetic observations throughout the world today.

In 1833 at Goettinger he erected a magnetic observatory free from iron, where he made magnetic observations, and from which he sent telegraphic signals to a neighboring town, thus showing the practicability of an electro-magnetic telegraph.

(A biography of Michael Faraday and Jean Bernard Leon Foucault will appear in a subsequent issue.)

Julia: "And at the end of his letter he put a couple of X's. What does he mean?"

Hilda: "Simple girl! It means he's double-crossing you."

—AH—

"What's this old refrigerator doing in your daughter's room?"

"She's in love with the iceman and calls it her hope chest."

—HER NAME—

Plumber: "I came to fix that old tub in the kitchen."

Small Boy: "Mother, here's a man to see the cook."

—NO WORD—

"Hello, Willie," exclaimed the kind old traveling man, "how is your dear old grandpa standing the heat?"

"Ain't heard yet," said Willie, "he's only been dead a week."

Of Interest To Women

Hot Weather Suggestions

CREOLE EGGS

THREE tablespoons butter, 4 tablespoons flour, $\frac{1}{2}$ teaspoon salt, $\frac{1}{4}$ teaspoon pepper, 2 cups tomatoes, 2 tablespoons chopped onions, 2 tablespoons chopped green peppers, 6 hard cooked eggs sliced, $\frac{1}{3}$ cup finely cut cheese, 4 slices bacon.

Melt butter and add flour, salt, pepper and tomatoes. Cook until creamy sauce forms. Add onions, green peppers, eggs and cheese. Pour into shallow, buttered baking dish and top with bacon. Bake 25 minutes in moderately slow oven. Serve in dish in which baked.

APRICOT CONSERVE

Four cups peeled apricots, 2 cups diced pineapple (fresh or canned), 2 cups peaches, $\frac{1}{2}$ cup orange juice, 4 tablespoons lemon juice, 6 cups sugar.

Mix ingredients. Cook slowly 35 minutes or until conserve is very thick. Stir often while cooking. Pour into sterilized glasses and when cool cover with melted paraffin and store in cool, dark, dry place.

FRUIT PRUNE WHIP

One cup seeded, cooked prunes, $\frac{1}{2}$ cup sugar, 1 cup diced pineapple, $\frac{1}{2}$ cup white cherries, 3 egg whites, stiffly beaten; 5 tablespoons confectioner's sugar. 2 tablespoons lemon juice.

Mix prunes, sugar, pineapple and cherries. Cook slowly 10 minutes, stirring frequently. Cool. Beat egg whites until stiff. Add confectioner's sugar and stir until creamy. Combine ingredients and add lemon juice. Pour into glass serving cups. Chill 3 hours or longer. Serve.

CREAMED RADISHES

Use the large radishes. Pare, dice and place in cold water for five minutes. Have ready a rich white sauce and stir drained radishes into it. Heat well and serve. A dash of paprika over the top and a fine sprinkling of parsley complete a very attractive dish.

CUBAN CASSEROLE

Cook 1 cup of spaghetti in boiling salted water until tender. Drain and add 1 pound hamburger steak, 1 can tomatoes, 2 chopped onions, 2 chopped green peppers, salt and pepper. Mix together and pour into a buttered casserole. Cover the top with grated cheese and bake in the oven until a nice brown.

BUTTERSCOTCH SPANISH CREAM

A delicate flavoring for this popular dessert. Boil $\frac{3}{4}$ cup brown sugar and 2 tablespoons butter for 1 minute. Add 2 cups milk, 3 beaten egg yolks. Cook as for plain custard, flavoring with vanilla when thickened. Add $1\frac{1}{2}$ tablespoons gelatine dissolved

in 2 tablespoons water. When it begins to set, beat and then add whites of 3 eggs which have been beaten stiff with $\frac{1}{4}$ cup brown sugar. Pour into sherbet glasses and chill. A dab of whipped cream and a maraschino cherry make it quite a company dessert.

By Vera Olmstead Hamilton

(All recipes specially tested for four)

JELLIED VEAL LOAF

1 veal knuckle sawed in two	2 teaspoons salt
1 pound lean veal	$\frac{1}{8}$ teaspoon pepper
1 onion	2 teaspoons lemon juice
$\frac{1}{4}$ bay leaf	2 hard cooked eggs
	6 stuffed olives

Put knuckle of veal into cold water, bring slowly to boil and add lean veal, onion, and bay leaf. Simmer until veal is very tender. When almost done, add salt and pepper. Drain, reserving the liquor which should be $1\frac{1}{2}$ cupfuls. Garnish bottom of mold with thinly sliced hard cooked eggs and olives, put in a layer of meat, then another layer of eggs and the remainder of the meat. Add lemon juice to cooled liquor and pour over meat. Chill and turn onto a platter. Garnish with parsley or water cress.

STUFFED BEETS

4 large beets	$\frac{1}{2}$ teaspoon salt
$\frac{3}{4}$ to 1 pound green beans	4 teaspoons melted butter

Wash beets and cook slowly in boiling water until tender. Do not prick with fork but test by pressing between thumb and finger. Drain, rinse with cold water, and remove skins. Cut slice from top of beet and scoop out center. Sprinkle with salt and fill with beans. Pour one tablespoon melted butter over each beet. Serve hot.

To prepare beans, wash, cut in one-third inch lengths, and cook in boiling salted water until tender. Drain and use to fill beets.

Stuffed beets may be used as a salad. Chill vegetables, and marinate beans in French Dressing 30 minutes before adding to beets. Serve on a bed of lettuce with French Dressing.

RASPBERRY SHERBET

1 pint fresh raspberries	$\frac{1}{8}$ teaspoon salt
$\frac{1}{3}$ cup granulated sugar	1 tablespoon lemon juice
$\frac{1}{2}$ cup water	2 egg whites
	$\frac{1}{2}$ cup single cream

Wash and mash berries, add sugar and water. Cook about five minutes. Remove from fire and strain through fine sieve. Cool, add lemon juice and salt. Pour into refrigerator tray and allow to freeze until firm. Remove to bowl and whip until light. Fold in stiffly beaten egg whites and plain cream.

Chrysler Inspires a Pride All Its Own

UNION MOTOR COMPANY

270 Elk Street

ROCK SPRINGS, WYO.

Phone 77

Return to tray and finish freezing, stirring once during freezing process.

no help, even her relatives are unable to help her prepare her vegetables for dinner, just for the lack of a 25-cent kitchen utensil.

Household Hints

SICKROOM TIPS

A single flower in a narrow vase adds much to the beauty of the invalid's tray.

If you happen to read a funny story, a piece of beautiful poetry, cut them out of the paper and send one of these up with the tray each meal.

If the invalid is well enough to attend to herself when eating, leave her alone with the tray. You will find she will eat more and complain less when alone.

Never let slip what you are planning to bring to the invalid for the next meal. If you do you will find by that time she will have found all sorts of reasons why that is just the thing she does not feel like eating. Let the tray contain a surprise.

WELL OILED

If the clothes wringer is kept well oiled it will not be so much of a task to operate. Use the machine oil you are accustomed to using for your sewing machine.

When spots or rings appear after cleaning with fluids, allow to dry and then hold over steam from a tea kettle. The steam will remove rings or spots.

Leftover fish or fowl can be combined with mashed potatoes and shaped into cakes and browned in the oven.

FLOWING PENNIES

How many washers are needed on the spigots of the house in which you live? The water keeps on dribbling, whether you are watching it or not, and the meter keeps on ticking just the same.

THE ANT SEASON

Always wash the outside of the milk bottle before putting it into the refrigerator. It may have collected a few ants while on the porch or step and by washing the bottle you may save yourself endless worry and work of having these pests in your refrigerator.

POOR HOUSEKEEPING

I know of one housewife who has just one paring knife in her cupboard drawer and, as she employs

All There Is

An ivy covered cottage,
Some pickets painted white,
A little gate where children wait
Your coming home at night,
Then what's the use of splendor,
And what's the good of gold?
For you possess life's happiness,
Yes, all the heart can hold.

A pair of lighted windows,
And near an open door,
Some little chaps, ah, yes, perhaps
A baby on the floor,
Then what's the use of glory
And what's the good of fame?
For greater men will watch you then.

A table in the center,
Some books along the wall,
And men may dream and men may scheme,
But you have found it all,
A cottage and a garden,
Some children and a wife,
A clasp, a kiss—yes, brother, this
Is all there is to life.

—Douglas Malloch.

DIFFERENT

Mrs. Bloggs: "I haven't seen your old man lately. What's the matter with him?"

Mrs. Higgins: "He's had a seizure."

Mrs. Bloggs: "The heart?"

Mrs. Higgins: "No, the police."

SUSPICIOUS

Johnny: "I think my drum annoys the man next door."

Berty: "Why?"

Johnny: "Well, he gave me a knife this morning and asked me if I knew what was inside my drum."

Until there's a greater name than **EDISON**
—there'll never be a greater **RADIO!**
CHIPP'S, 607 No. Front St., Rock Springs

Alex C. Davidson and Wife



The Davidsons are recent arrivals at Winton having come from our adjoining state, Colorado. He has proved himself a valuable adjunct to the McAuliffe Pipe Band and our readers may recall seeing him in the Old Timers Parade in June. Coming originally from the

"land of heather," Alex "piped" in one of the Highland Regiments there.

Boys Leave For New Fork Lake Camp

Mr. J. I. Williams, Scout Executive for Southwestern Wyoming, accompanied by Boy Scouts of this district, left Rock Springs Sunday morning for the Boy Scout camp at New Fork Lake, about 125 miles northwest of Rock Springs. Representatives from Rock Springs, Reliance, Winton and Superior were in the caravan, together with Scoutmasters and others who will entertain the boys during the camp, which will last for a period of fourteen days.

Mr. Williams has everything arranged for the camp. Last year four cabins were built to house the Scouts. Mr. Williams plans during the present camp, with the help of the Camp Committee, to erect four more cabins. This will be a great addition to the camp and improve the housing facilities. A full write up of the camp activities will be furnished for the September Magazine, both for the boys' camp and for the girls', the girls going immediately to camp at the close of the boys' camp on July 27th.

Outside the City

In the artificial air
Of cities, I am full of care;
On smiling hills I'm glad and free:
On smiling hills that beckon me.

In the breeze there lies a hand
Tenderly caressing. And
Here God reveals himself to me
Intimately in all I see.

This land holds out to me its rest:
In its arms I am caressed.
Here God is smiling tenderly
In everything His children see.

—Magda Brandon in "The Chicago Girl."



**WHY IS IT
SO MANY MOTORISTS
ARE TURNING TO THIS
NEW OIL?**

This week's increase in the sale of Conoco Germ-Processed Motor Oil will still further emphasize its position as the motor lubricant of the hour. Even now, Conoco men are serving customers they never saw before, one time out of three.

Perhaps you are inclined to regard this as incidental. So are we. The real reason behind this wholesale change from other brands to Germ-Processed is this: Conoco Germ-Processed Motor Oil meets and satisfies a real need for better lubricants.

The exclusive Germ Process gives to Conoco Germ-Processed Motor Oil the unique quality known as "Penetrative Lubricity."

When will you come and ask for Germ-Processed Oil . . . at the sign of the Red Triangle?



**CONOCO
GERM
PROCESSED
PARAFFIN BASE
MOTOR OIL**

Our Little Folks

The Insect World

By MARY FRANCES SUMMERS

Assistant Curator of Art, Illinois State Museum,
In July "Child Life."

THE SPIDER

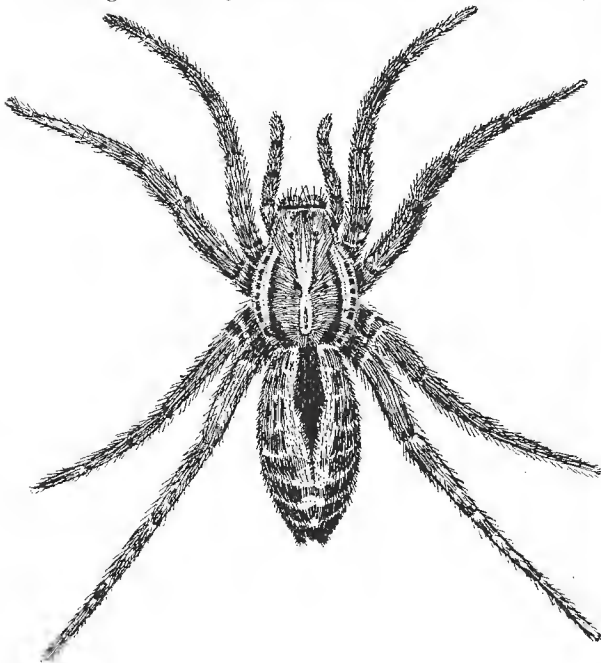
THIS hairy spider, which really isn't an insect because she has eight legs instead of six, lives in fields and gardens. She is a miner, spinner and hunter of insect game.

Her home is an underground tunnel which she makes with a platform going straight back, on which she watches for unsuspecting passers-by. She has eight eyes to watch with and let her know who is at her doorway.

Like the mantis she can pop up very suddenly to snatch the amazed insect before he knows what it is all about. She paralyzes her victim, so that he does not feel pain.

Spiders do not often bite people, and if one is bitten there is usually only a red bump to remind one of the affair. But once in a while a spider bite is so painful that it is better to become acquainted with all spiders at a little distance.

Now having told you some rather uncomplimentary things about her, I will tell you what a devoted mother she is. She comes out of her safe home which has such narrow walls and spins a rough silk rug on which to work. Then, when sure of a clean place, she spins a fine white silk bag of very good size. In this bag she lays her eggs. Having carefully fastened the edges of the bag together, she carries the bag everywhere she goes, looking as though she had just collected the family laundry.



At night she takes the bag into her tunnel but early in the morning it is taken out to get the sun. When the youngsters hatch they climb up one of her furry legs and soon she is covered with the little beasties.

She has more children than the Old Woman Who Lived In a Shoe but she seems to know just what to do. No one could get so many into a baby buggy, so she just lets them ride on her back, and whenever they take a tumble she gives them a leg up again.

A Spelling Bee Puzzle

By HELEN JELLIFFE BOWEN

What animal, if turned, about,
Would be a sailor bold?
What dreadful thing, were it reversed,
Would be uncooked or cold?
What place where coal is kept, transposed,
Become a birdling's beak?
What cooking vessel, backwards read,
Becomes a toy unique?
And now, this one will make you laugh,
Your face just won't stay straight-o;
What little girl, her name turned round,
Would be a sweet potato?

—(Copied from "Child Life.")

ANSWERS TO A SPELLING BEE PUZZLE

R-A-T, t-a-r; W-A-R, r-a-w;
B-I-N, n-i-b; P-O-T, t-o-p;
M-A-Y, y-a-m.

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COURTEOUS SERVICE
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News About All of Us

Rock Springs

Miss June Buckley, of Denver, is visiting at the home of Mr. and Mrs. Hans Hansen.

John Corona has returned from an extended visit with relatives in Southern Europe.

Mr. and Mrs. Jas. V. Macdonald have returned from a vacation spent in Los Angeles and other points in Southern California.

Frank Vehar is remodeling his home on Pilot Butte Avenue.

Doctor and Mrs. T. H. Roe have returned from a short visit with relatives at Fort Bridger.

Mr. and Mrs. Frank Overy, Sr., have returned to their home in Salt Lake City, after having visited

with their daughter, Mrs. Jake McDonald.

Eliza Poulson, of Brigham City, Utah, and Robert Armstrong, were recently married in Salt Lake City. Their many friends extend hearty congratulations.

George L. Parr and family are spending a vacation in Denver and other points in Colorado.

Miss Irene Mofitt is in Salt Lake City where she is receiving medical treatment.

Angus J. Hatt was called to Utah by the death of his father, Frederick Hatt. The sympathy of the entire community is extended to Mr. Hatt in his bereavement.

Herbert Sharp is confined to his home with eye trouble.

Mrs. Albert Hardin and family are enjoying a month's vacation at Pine-dale.

Mr. and Mrs.

John K. Johnson have moved into the house recently vacated by Milan Painovich at No. 3.

John Burns has returned from a vacation spent at Lava Hot Springs, Idaho.

Mrs. H. C. Williams is recovering from a major operation recently undergone at the Wyoming General Hospital.

Mr. and Mrs. Dan Bosnich are the proud parents of a baby daughter born on Thursday, June 19th.

Sam Kovich has been confined to his home the past week with the flu.

John Peters, who has been confined to the hospital for some time, is now rapidly recovering and has returned to his home.



Annie Yovich, age two, and Sister Marie, age four, children of Mr. and Mrs. Matt J. Yovich, Rock Springs. Matt is an Old Timer, having entered the service of The Union Pacific Coal Company in 1908 at Rock Springs. He married Annie Kralj here on May 4th, 1924. For six years, he served as Auditor of District No. 22, U. M. W. of A. and has many years to his credit as check weighman at Mine No. 4 here.

Mrs. John Sorbie has been on the sick list for the past two weeks.

Mrs. Lucile Felin and children have gone to Greeley, Colorado, where they will spend the summer.

Mr. and Mrs. Joe Kudar have returned from a visit to Lava Hot Springs, Idaho.

Glen Lauder received slight injuries in an automobile accident on Tuesday, July 8th.

Mr. and Mrs. James Moon, Sr., have returned from a visit with relatives in Evanston.

Mrs. E. A. Prieshoff is visiting her parents, Mr. and Mrs. E. J. Kerrigan, Cheyenne.

Clarence Johnson and family have returned from Salt Lake City, where they visited with Mr. Johnson's parents, Mr. and Mrs. Chris Johnson.

Mr. and Mrs. Henry Yrkkola have gone to Duluth, Minnesota, where they expect to locate.

Winton

George Herd recently brought back a four and one-half pound trout.

Ambrose McKenna is driving a new Paige Sedan. A farewell party was given for Mr. and Mrs. Bert Robbing who are leaving for California.

Mrs. J. W. Dale is visiting her daughter, Mrs. J. W. Vickroy.

Mrs. Ed. Williams of Albuquerque, New Mexico, is visiting her parents, Mr. and Mrs. Geo. Phillips.

Mr. and Mrs. A. J. Kalinowski visited their daughter, Mrs. J. A. Neal.

Mrs. Wesley Toy and son is visiting her mother-in-law, Mrs. Albert Sclang.

Miss Flora H. Krueger and Miss Flora B. Krueger, aunt and sister of Dr. Krueger, visited here last week.

Abe Benson is in the hospital.

The eighteen months old daughter of R. W. Fowkes has been very sick.

Fannie Flaker visited in Denver for several days. Shortly after Hans Madsen left on his vacation,

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of Rock Springs

and

First Security Bank
of Superior

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*Your saving on light will
not begin to keep you in
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Pilot Butte and N Street

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As they grow up they will acquire a realization of the true value of money —the basis of every successful career.

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ROCK SPRINGS, WYOMING

Open Mine paydays from six until eight.

Winton was in a turmoil over a rumor that he had been married. On his return, he stoutly denied having joined the ranks of the benedicts. However, only time will tell.

Reliance

Reliance vacation time saw most of our small community in different parts—fishing appealing to most of the males the north country beckoned. Many and divers are the tales told of their big catches.

Mr. and Mrs. Dave Freeman and small son have returned from a trip to Omaha.

Floyd Roberts, Pocatello, Idaho, visited several days at the Hugh Kelley home.

Luke Harrigan is home for the summer. Luke is a junior at the University of Wyoming.

Mrs. Raymond Dupont and children are spending the summer in Dawson, New Mexico.

Bill Gibbs, who met with an auto accident on his way here from Salt Lake, has been discharged from the hospital and is convalescing at the home of his parents in Reliance.



Mr. and Mrs. Fred Bradley and Mr. and Mrs. Bob Stuart have returned from a trip to Missouri.

Mr. and Mrs. Francis Patterson have a brand new son and heir. Mrs. Patterson will be remembered as Flora Mattonen who formerly lived here.

Mr. and Mrs. Zach Portwood and daughter (Mrs. Jack Rafferty) spent their vacation in Denver and Wyoming parts.

The Ralph Buxtons have gone to Pinedale for the summer.

Mrs. Douglas Rahm and small son, of Pinedale, are frequent visitors at Mrs. Rahm's mother and father (the William Telcks).

Here are some caught during vacation by Bill Greek and A. L. Zeiher, 3¾ to 4½ lbs. each, seven Natives and one German Brown. Come on Matt, what are you doing? These fish were caught in one of our streams north of here.

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stead of on sills—lowering the center of gravity and eliminating sidesway. With so safe and handsome a body, with so much in roominess, performance and beauty, the Dodge Six is by all comparisons a truly exceptional value. If you see it and drive it, you will want it.

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If desired, the Rock Springs Water Company will improve the tract at additional cost by building a 3-room log cabin, clearing, levelling, plowing, seeding and fencing the tract. This expense may also be paid for in small monthly installments. With our knowledge of conditions and our equipment, we can do this work more economically than an individual could do it.

In case of sickness, or other unforeseen contingencies, such as layoffs, etc., payments on the contract will be extended.

DRIVE OUT TO EDEN VALLEY, OR LET US ARRANGE TO TAKE YOU ON AN INSPECTION TRIP, SO THAT YOU MAY SEE ONE OR MORE OF THESE TRACTS WHICH THE COMPANY HAS IMPROVED ON CONTRACT WITH THE PURCHASERS. SUCH A TRIP WILL BE WITHOUT ANY COST OR OBLIGATION ON YOUR PART.

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Boulder Creek
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Frank Lindroos
Employee at
Reliance



Reliance was well represented at Cumberland on the days of the celebration which marked the closing of that community. Several of the Cumberland families have come to Reliance to make their home.

Mr. John Holmes is again at his post after a serious illness.

Another of our girls has joined the ranks of the "Double Harness"—we now call Rachel Buckles Mrs. John Jorgensen and we will have to journey to Pinedale to visit her; that being her new home.

Mr. and Mrs. Harry Lawrence, daughter Billie, and Bill Greek went fishing up around Burnt Lake parts and they truthfully admit that mosquitoes were their only catch.

Mrs. L. G. Hay and baby daughter, Salt Lake, have been visiting at the home of her sister, Mrs. Richard Gibbs.

Mr. Matt Medill has had as his guests Mr. and Mrs. R. M. Medill of Oak Creek, Colorado. They

visited here over the "Fourth" and then in company with Mr. Medill and Miss Kate Medill drove to Lander and from there back to Oak Creek.

Mrs. James Sellars was surprised by a visit from her mother, Mrs. C. H. Hobak, and daughter Virginia, of New Haven, Wyoming.

Superior

Mrs. Lawrence Harshbarger has just returned from a pleasant visit with her parents, Mr. and Mrs. G. W. Woods of Harrisburg, Missouri.

Mr. and Mrs. Robert Applegate and family have just returned from a trip through Yellowstone Park. They also visited their son, Charles, at Great Falls, Montana.

The L. D. S. Society gave its annual dinner at the club house Tuesday. This event closed the business for the season and the organization will resume its work in October.

Miss Vella Wylam is attending school at Boulder, Colorado.

Bett Moore is attending summer school at the Wyoming University.

During the month Mr. and Mrs. Stanley Lisher visited friends and relatives in Kansas.

The many friends of Fay Barger and Murray Noble are pleased to know that they are recovering from their recent illness.

Mrs. Albert Hicks has just returned from a visit with her father, John Lindsey, in Salt Lake City.

Mrs. Matt Arkle entertained her 500 Club at the Community Building Thursday evening. The prize winners were Mrs. P. O'Connell, first; Mrs. William Ferrell, second; Mrs. Joe Mettam, consolation, and Mrs. Earl Williams, guest.

Andrew Young left Saturday night for Pittsburg, Kansas, to meet his wife, who has been visiting her



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30x4.50	. \$ 8.25
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30x5.25	. \$10.75

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They cost no more than tires that you are embarrassed to have your friends see on your car.

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Rock Springs
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"Where your dollar is a Big Boy all the time"

Winton

Superior
Hanna

parents for the past three months. They expect to return in a few weeks.

Mrs. Wendell Clark and son have returned from a short visit in Kemmerer. They were accompanied home by Mrs. R. Hocker, who spent a few days as their guest.

Mr. and Mrs. Joe Peterson left July 1st for a trip through Yellowstone Park.

During the month, Mr. and Mrs. A. G. Hood spent a few days in Salt Lake City, returning by way of Ogden and Bear Lake. They report extremely hot weather in Salt Lake.

Hanna

Mr. and Mrs. Matt Strannigan and son, Mr. and Mrs. William Matthew and son, Mr. and Mrs. Dave Wilson and daughter, Janet, and Mr. Shelton, all of Rock Springs, spent a recent week end at Hanna visiting Mr. and Mrs. Hugh Renny.

Mrs. A. Clark and daughters, Lava Hot Springs, Idaho, visited with Mr. and Mrs. Alex Clark for a few weeks enroute to Nebraska, where they will reside.

Miss Beth Lee and Jack Lee, Jr., are spending their vacation at Cokeville visiting relatives.

Mrs. G. W. Hughes and daughters (Willamy and Esther) motored here from Kenilworth, Utah, and spent a few weeks visiting relatives and friends.

Mrs. Angwin and Dorothy left for Mountain View, Wyoming, where they will reside.

Mrs. John Carr and sons, Washington, D. C., spent a few days in Hanna visiting relatives and friends.

Mr. and Mrs. Roy Cummings were called to North Dakota by the serious illness of Mrs. Cummings' father, Mr. Bliss.

Mr. and Mrs. Joe Wise and family of Winton were guests of Mr. and Mrs. J. V. McClelland for a few days.

The members of the Ladies' Aid of the Methodist Church visited the Ladies' Aid at Saratoga on June 20th.

Mr. and Mrs. O. C. Buehler's daughter, Margaret, and niece, Dorothy Benedict, spent their vacation motoring to Yellowstone Park.

Mrs. O. G. Sharrer visited in Salt Lake City during the month.

Among those who spent the Fourth visiting at the Boy Scout camp at Medicine Bow Lodge were the Renny, Dexter and Lemoine families.

The Bartons, Higgins and Wm. Briggs' families spent the Fourth at East Fork.

Mr. and Mrs. Evan Jones and family, Mrs. James Fearn, Mrs. Anna Tate and Misses Phyllis and Ruth Milliken motored to East Fork on July 6th.

We are glad to announce that Mrs. Anna Tate, who was laid up for some time with a broken ankle, is able to be around again.

Mrs. Evan Jones had as her guests for a few days her sister, Mrs. George Parr and family, Rock Springs.

Leroy Jones spent a few weeks visiting his aunt and uncle at Rock Springs.

Misses Ruby Fearn and Hazel Jones are working at Elk Mountain for the summer.

Mrs. Helen McAtee visited here for a few days with her daughter and son-in-law, Mr. and Mrs. William Moffitt.

Wm. A. Raite and his folks are spending a two-weeks' vacation at Saratoga.

Mrs. Helen Parr, of Rock Springs, attended the funeral of Thos. Dickinson here on July 8th.

Mr. and Mrs. Geo. Sutton and son of New York, enroute to California, stopped off to renew old acquaintances. Mr. Sutton worked in the Hanna Mine Office about twenty-five years ago.

The many friends of Thos. Dickinson were grieved to hear of his death at Elk Mountain on July 5th. The deceased was 38 years old, he was born in British Columbia and came to Carbon with his parents when only nine months old. Later his folks moved to a ranch near Elk Mountain where he spent most of his life. He also lived in Hanna where he worked around the mines for many years. He served in the army during the World War.

The funeral was held at the Episcopal Church on July 8th, with services by Rev. Bacon, The American Legion, the Moose Lodge, and the Eagles Lodge participating. Interment was made in Carbon Cemetery.

He leaves to mourn his going, his wife, mother, two sisters, Mrs. Margaret Reese of Hanna, and Mrs. C. O. Lancaster, Edgewater, Colorado, and one brother, William Dickinson, of Hanna, besides other relatives and a host of friends.

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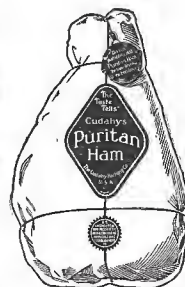
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Jos. Facinelli, Asst. Cashier
John Wataha, Asst. Cashier

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HEAVY HAULING

BAGGAGE TRANSFER—STORAGE

CRYSTAL ICE

Rialto Building

ROCK SPRINGS

Phone: Day, 375; Night, 140

Auto Glass—Mirrors—Window Glass

WE ARE headquarters for Muresco,
Paints, Varnishes, Enamels, and Brushes. If you
have paint to clean, see us. We have the best paint
cleaner on the market.

Acme Glass & Paint Co.

227 C Street

ROCK SPRINGS, WYO.

ROCK SPRINGS STEAM LAUNDRY

SMITH BROS., Props.

Rock Springs

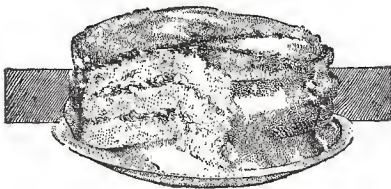
Phone 18

Woman, why bend thy willing back
And rub thy knuckles tender?

Jam the old washing in a sack
And to the Laundry send 'er.

Why Bake— *these hot days!*

We Receive Fresh Bakery Goods Every Day

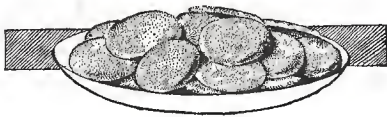


30 Cents Each.

SWEETHEART CAKES

in six varieties

Each cake wrapped in Cellophane Wax Paper, insuring freshness. —

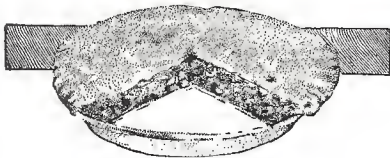


30 Cents Dozen.

CUP CAKES

Chocolate or Vanilla

Made with fruit and tastily iced. —



25 Cents Each.

PIES

Big and Tasty

Filled with the finest fruits, with crisp eatable crusts. —

THE UNION PACIFIC COAL COMPANY STORES

"Where Your Dollar is a Big Boy All the Time"

Rock Springs
Reliance

Winton

Superior
Hanna